

A FIRST LOOK AT MANKIYALI MORPHOLOGY

Eric G. Englert

Thesis Prepared for the Degree of

MASTER OF ARTS

UNIVERSITY OF NORTH TEXAS

May 2022

APPROVED:

Sadaf Munshi, Major Professor

Peter Schuelke, Committee Member

Dorian Roehrs, Committee Member

William Salmon, Chair of the Department of
Linguistics

Kinshuk, Dean of the College of Information

Victor Prybutok, Dean of the Toulouse
Graduate School

Copyright 2022

By

Eric George Englert

ACKNOWLEDGEMENTS

This thesis is a product of the documentation project funded by the United States National Science Foundation (award №1761658; 2018). First and foremost, this project would not have been possible without the collaboration of the Mankiyali speech community. In particular, my primary consultants and research partners were Aurangzeb and Gohar Ur-Rehman, whose years of patience with my beginner-level Urdu and hours of work on campus each week enriched both this research endeavor and my experience as a student. This would additionally not have been possible without the generous support of my committee members throughout this process. My committee chair and mentor, Sadaf Munshi whose work on Kashmiri and Burushaski piqued my research interest in South Asian languages, and whose years of patience with my shenanigans made this possible. Peter Schuelke, whose enthusiasm and guidance was key in focusing my energy onto a single topic. Dorian Roehrs, whose straightforward feedback was key to keeping this project manageable.

I would additionally like to thank the various groups and people I've worked with both in the United States and in Pakistan. The close cooperation over the years with members of our research team: Jonathan Paramore, Javid Iqbal, Midhat Shah, Tiffany Blanchett, Keivan Kaviani, and Jesús Robledo was indispensable. Fakhruddin and the Forum for Language Initiatives were instrumental in facilitating my time in Pakistan. I look forward to working with you all in the future.

Lastly, I would like to thank my parents, who always supported me in following my passion for languages. Together they fostered an environment where curiosity and investigation were always encouraged. Thank you all so much.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES	vi
List of Tables.....	vi
List of Figures	vii
LIST OF ABBREVIATIONS.....	ix
CHAPTER 1: INTRODUCTION	1
1.1 On Mankiyali	1
1.1.1 Phonology	3
1.1.2 The Lexicon.....	3
1.1.3 Typology	4
1.2 Methodology.....	15
1.3 Transcription Key	16
1.5 Organization of the Thesis	17
1.6 Summary	17
CHAPTER 2: NOUNS AND PRONOUNS	18
2.1 Case Morphology and Noun Classes	19
2.1.1 Noun Classes	19
2.2.2 Layer I Cases	24
2.2.3 Layer II Cases	28
2.3 Pronouns	33
2.3.1 Personal Pronouns	33

2.3.2 Possessive Pronouns	34
2.3.3 Interrogative Pronouns	35
2.3.3 The Reflexive Pronoun	36
2.3.3 The Relative Pronoun	37
2.3.4 The Indefinite Pronoun	39
2.4 Summary	39
CHAPTER 3: ADJECTIVES AND ADVERBIAL MODIFICATION.....	40
3.1 Adjectives	40
3.1.1 Type I Adjectives	40
3.1.2 Type II Adjectives	42
3.1.3 Type III Adjectives	43
3.2 Adverbs and Adverbial Modification.....	45
3.3 Quantifiers and Numerals	46
3.3.1 Quantifiers.....	46
3.3.2 Cardinal Numerals.....	47
3.3.3 Ordinal Numerals	50
3.4 Summary	54
CHAPTER 4: POSTPOSITIONS.....	55
4.1 Locative Relations	56
4.1.1 <i>agul</i> 'before'	56

4.1.2 <i>baad</i> ‘after’	56
4.1.3 <i>dan</i> ‘under’	57
4.1.5 <i>mat</i> ‘on’	58
4.1.6 <i>mīnaa</i> ‘with’	58
4.2.7 <i>nīn</i> ‘near’	58
4.2.8 <i>vā</i> and <i>mazar</i> ‘in’	59
4.2.9 <i>var</i> ‘towards’	60
4.3 Summary	60
CHAPTER 5: VERBS	61
5.1 Stem Alternation	61
5.1 <i>Vaṇa</i> ‘to be’	62
5.2 Tense–Aspect–Mood	63
5.4 Summary	67
CONCLUDING REMARKS.....	68
APPENDIX A: TRANSCRIPTION KEY	69
APPENDIX B: MAPS	72
BIBLIOGRAPHY	77

LIST OF TABLES AND FIGURES

List of Tables

Table 1: Historic Sound Changes in Mankiyali.....	3
Table 2: Mankiyali Lexical Items inherited from OIA	4
Table 3: Lexical Borrowing in Mankiyali	4
Table 4: Class I Noun Paradigms	20
Table 5: Class II Noun Paradigms	21
Table 6: Class III Noun Paradigms	22
Table 7: Class IV Noun Paradigms	23
Table 8: Class V Noun Paradigms	24
Table 9: Nominal Direct Case Paradigms	24
Table 10: Nominal Oblique Case Paradigms	25
Table 11: Nominal Ergative Case Paradigms	26
Table 12: Nominal Vocative Case Paradigms	28
Table 13: Summary of Layer II Case Suffixes	29
Table 14: Dative Case Paradigms	29
Table 15: Ablative Case Paradigms	30
Table 16: Genitive Noun Paradigms	32
Table 17: Mankiyali Personal Pronouns	33
Table 18: Kashmiri Direct Case 3rd Person Personal Pronouns	34
Table 19: Mankiyali Possessive Pronoun Paradigms	34
Table 20: Mankiyali Interrogative Pronouns	35
Table 21: The Mankiyali Reflexive Pronoun	37
Table 22: The Mankiyali Relative Pronoun	38

Table 23: The Mankiyali Indefinite Pronoun	39
Table 24: Type I Adjective Paradigms	42
Table 25: Type II Adjective Paradigms	43
Table 26: Type III Adjective Paradigms	44
Table 27: Mankiyali Adverbs	45
Table 28: Mankiyali Quantifiers	46
Table 29 Cardinal Numerals 1-20	48
Table 30 Cardinal Numerals 21-99	48
Table 31 Cardinal Numerals 100 and Greater	50
Table 32: Ordinal Numerals 1-20	51
Table 33: Ordinal Numerals 21-99	52
Table 34: Ordinal Numerals 100 and Greater	53
Table 35: Attested Postpositions in Mankiyali	55
Table 36: Verb Stem Classifications	62
Table 37: Conjugation Paradigm of <i>vaṇa</i> 'to be'	63
Table 38: Conjugation Paradigm of <i>karaṇa</i> 'to do'	64
Table 39 Summary of Modal Morphemes	67

List of Figures

Figure 1: Tree Diagram of the Mankiyali Noun Phrase with a Determiner	6
Figure 2: Tree Diagram of the Mankiyali Noun Phrase with an Adjective.....	6
Figure 3: The Mankiyali Postpositional Phrase	14
Figure 4: Structure of the Mankiyali Verb.....	14
Figure 5: Comparative Structure of the Perfect Past, Imperfect Past, and Preterite of <i>karaṇa</i> 'to do'	15

Figure 6: Tree Diagram of a Mankiyali Sentence.....	15
Figure 7: Mankiyali Layered Case System	18
Figure 8: Map of Pakistan	73
Figure 9: Map of Khyber Pakhtunkhwa Province (KPK) and Environs.....	74
Figure 10: Map of Oghi Tehsil and Environs.....	75
Figure 11: Map of Bandi Shungli Municipality	76

LIST OF ABBREVIATIONS

Language		Term	Gloss
Arabic	Ar	First Person	1
Burushaski	Bsk	Second Person	2
English	Eng	Third Person	3
Gujarati	G	Ablative	ABL
Hindi	H	Accusative	ACC
Hindko	Hnk	Benefactive	BEN
Kashmiri	K	Dative	DAT
Kalasha	Ksh	Direct	DIR
Khowar	Kho	Distal	DIST
Kohistani, Unspec.	Koh	Ergative	ERG
Kohistani, Indus	Koh.Ind	Future	FUT
Mankiyali	Mnk	Genitive	GEN
Middle Indo-Aryan	MIA	Feminine	F
New Indo-Aryan	NIA	Imperative	IMP
Old Indo-Aryan	OIA	Imperfect	IMPF
Pahari, Western	Pah.W	Indefinite	INDEF
Pashto	Psh	Indicative	IND
Punjabi	P	Infinitive	INF
Sanskrit	S	Instrumental	INSTR
Shina, Unspecified	Sh	Invisible	INV
Shina, Kohistani	Sh.Koh	Masculine	M
Torwali	Tor	Nominative	NOM
Urdu	U	Oblique	OBL
		Participle	PTCP
		Particle	PTCL
		Past	PST
		Perfect	PRF
		Plural	PL
		Present	PRS
		Preterit	PRET
		Proximal	PROX
		Semblative	SEMBL
		Singular	SG
		Subjunctive	SUBJ
		Vocative	VOC

CHAPTER 1

INTRODUCTION

There is a core distinction between language documentation and description, outlined by Himmelmann (1998), but there is still a “bilateral mutual dependency” regarding the relationship between language documentation and description and that the provision of data supporting the description is critical to any successful descriptive work (Gawne & Berez-Kroeker, 2018, p. 22). With up to 90% of languages currently spoken estimated to disappear without intervention by the end of the 21st century, it is critical that documentary and descriptive works continue to be undertaken in order to benefit the speech communities of languages that are at-risk (Linn, 2018, p. 72). This thesis is primarily a descriptive endeavor, with a secondary comparative component in order to provide context for a number of phenomena that are unattested or incongruous with patterns observed in contact languages. This is an initial description of the inflectional morphology of the Mankiyali language; this thesis provides an analysis of data collected as part of the documentary effort that may be incorporated into future research, both morphological and in other domains, with implications for both the ongoing descriptive, documentary, and preservatory work on Mankiyali.

1.1 On Mankiyali

The Mankiyali language (ISO:693-3 nlm)¹ is an Indo-Aryan language variety spoken by a community that resides primarily within two villages: Danna and Dameka.² Both are situated approximately 90 kilometers North by West of Islamabad and administered as a part of Bandi Shungli Municipality (Figure 11) within Khyber Pakhtunkhwa’s Oghi Tehsil in

¹ (International Organization for Standardization, 2017)

² 34°28’42”N, 72°57’14”E

Mansehra District (Figure 10).³ The overall population of Mankiyali speakers is estimated at around 500 individuals, with more than 300 in Danna, fewer than 50 in Dameka, and additional speakers living in urban areas of Pakistan (Figure 8), especially Lahore, Islamabad, and Karachi. The Mankiyali community is experiencing significant language shift towards Hindko, a lingua franca of Hazara Division,⁴ with all L1 speakers of Mankiyali bilingual in Hindko. Additionally, members of the Mankiyali language community are often proficient in a number of other languages, including Pashto (an additional official language of Khyber Pakhtunkhwa Province) as well as Urdu and English, both official languages at the national level.

The Mankiyali language is of uncertain affiliation within the context of Indo-Aryan languages. At present, the body of literature on Mankiyali is limited, but growing. In 2015, a sociolinguistic survey of the community was published (Anjum & Rehman, 2015). Subsequently, Anjum's (2016) dissertation provided additional context regarding language shift experienced by the community. Subsequently, Paramore's (2020) thesis provides a comprehensive overview of Mankiyali phonology, including the phonemic inventory, phonotactic constraints in Mankiyali, and prosodic phenomena. This followed an illustration of the phonemic inventory of the language, with a focus on use of the International Phonetic Alphabet in transcription (Munshi & Englert, in press).

³ U: بانڈی شنگلی. Romanization is inconsistent. The former National Reconstruction Bureau published the name as Badi Shungli. The Pakistan Bureau of Statistics (2017, p. 32) romanizes as "Bandi".

⁴ 57% of Hazara Division respondents to the 2017 census list Hindko as their mother tongue; 20% of respondents are Pashto-speakers. As a whole, Khyber Pakhtunkhwa is 11% Hindko speakers, 77% Pashto speakers (Pakistan Bureau of Statistics, 2017).

1.1.1 Phonology

Mankiyali phonology is largely typical of New Indo-Aryan (NIA) languages, with a number of distinguishing characteristics. Primarily, while stress is not phonemic (Paramore, 2020), the OIA series of voiced aspirated consonant phonemes /g^h/ /j^h/ /ɟ^h/ /d^h/ /b^h/ has given way to a system of tonal contrast. Additionally, OIA /č/ has developed into /c/, as in Kashmiri (Munshi, 2006), however unlike in Kashmiri wherein OIA /č^h/ developed into /c^h/, this phoneme has instead lenited to /s/ in Mankiyali, as outlined in Table 1, below.

Table 1: Historic Sound Changes in Mankiyali

Gloss	OIA	MIA	Kashmiri	Mankiyali
‘skin’	čarman	čamma	cam	camaṛa
‘four’	čatvarah	čayaari	coor	coor
‘calf’	vatsa ⁵	vač ^h a	voc ^h	basa

The phonotactics of tone in Mankiyali are predictable enough that overt marking of tone contour is unnecessary. The distinction in tone bears an extremely low functional load, but is nevertheless phonemic, with a number of minimal pairs documented (Munshi & Englert, in press). Tonal sandhi is predictable, with two adjacent marked tones following a HL.LH pattern, otherwise resulting in a L.LH pattern when preceded by an unmarked syllable.

1.1.2 The Lexicon

The vast majority of nouns in the Mankiyali lexicon are of Old Indo-Aryan origin. Additionally, intense and sustained language contact has resulted in a number of words being borrowed from Persian—possibly via Urdu—as well as Hindko and English. A number of these, such as *mosaafar* ‘traveller’ have ultimate origins in Arabic (cf. *vs-f-r* ‘travelling’; /*musaafir(-un)*/⁶ ‘traveller(-NOM.INDEF)’). Table 2, below, provides a selection of nouns

⁵ /c/ was not phonemic in OIA.

⁶ Ar. مُسَافِرٌ

inherited from Middle Indic with their attested forms in OIA. Unless otherwise indicated, the following MIA forms are sourced from Turner (1962: 93; 157; 252; 511; 531; 568)

Table 2: Mankiyali Lexical Items inherited from OIA

OIA	MIA	Mankiyali	Gloss
paṇiya	paṇiia ⁷	paṇi	‘water’
martya	mačča	muš	‘man’
p ^h ulla	p ^h ulla	ful	‘flower’
b ^h aginii	b ^h aginii	péēṇ	‘sister’
kaala	kaalaa	kaalaa	‘black’
čandra	čāda	can	‘moon’

Table 3 demonstrates a selection of lexical items borrowed into the lexicon.

Table 3: Lexical Borrowing in Mankiyali

Origin	Mankiyali	Gloss	Source Language
frypan	f(a)rifan	‘frying pan’	English
b ^h aaluu	baaluu	‘bear’	Urdu
aabšaar ⁸	abšaar	‘waterfall’	Persian
qisma(t) ⁹	kismaat	‘fate’	Arabic
dariya ¹⁰	dariya	‘river’	Urdu
fridge	frīj	‘refrigerator’	English

1.1.3 Typology

From a morphosyntactic perspective, Mankiyali is a largely typical Indo-Aryan language: there is a greater tendency towards fusional inflection and derivation than agglutinative inflection, but this is not without exceptions: in particular, the dative suffix is notably agglutinative, with the noun it modifies often immediately separable into constituent components.

⁷ (Bashir & Conners, 2019: 93)

⁸ Pers. {آبشار}

⁹ Ar. *qisma(-tun)* {قِسْمَةٌ} via Pers. *kesmæt* {قسمت}

¹⁰ Pers. *dæryaa* {دریا} ‘sea, ocean’

Basic word order is Subject–Object–Verb; exceptions to SOV word order are marked in Mankiyali, with a number of pragmatic motivations behind alternations in word order, as is common both within Indo-Aryan languages and a dominant areal feature. Additionally, adpositions are exclusively postpositional in nature.

1.1.3.1 The Noun Phrase

The Mankiyali noun phrase is broadly consistent with the patterns attested in other Indo-Aryan languages. Mankiyali nouns have inherent grammatical gender (i.e., either masculine or feminine) and they decline for case. They may additionally be marked for indefiniteness, taking the cardinal numeral *yak* ‘one’ as an indefinite marker. Nouns are distinguished from adjectives both semantically and morphologically, with adjectives restricted to declining for solely the direct, oblique, ergative and vocative cases.

Aside from nouns proper, the noun phrase in Mankiyali may optionally include a determiner and an adjective as illustrated in Example 1. Determiners available in Mankiyali include *yak* ‘one’, *xašɪ* ‘some’ used for mass nouns, and *ki* ‘some’ used for plural count nouns. Additionally, Figures 1 and 2 provide tree diagrams for these noun phrases using X-Bar Theory.

1. The Mankiyali Noun Phrase

- a. *zaandaak*
 zaandaak -∅
 boy -DIR.M.SG
 ‘a/the boy’
- b. *yak zaandaak*
 yak *zaandaak* -∅
 one *boy* -DIR.M.SG
 ‘a boy’¹¹
- c. *yak nika zaandaak*
 yak *nik* -a *zaandaak* -∅
 one *small* - DIR.M.SG *boy* -DIR.M.SG
 ‘a small boy’

Figure 1: Tree Diagram of the Mankiyali Noun Phrase with a Determiner

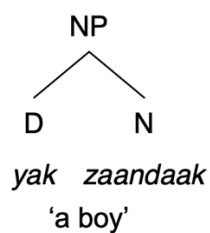
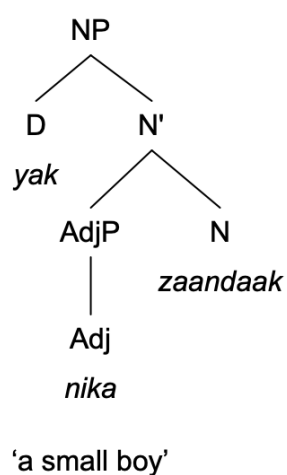


Figure 2: Tree Diagram of the Mankiyali Noun Phrase with an Adjective



¹¹ Also ‘one boy’, emphatic, as opposed to two boys

1.6.1.1 Ergativity

According to Comrie (1978: 350), describing a language as either ergative or nominative-accusative as though the two are in opposition to one another is misleading, in that a given language likely displays characteristics of both alignments. Below is a definition of ergativity provided by Comrie in *Ergativity*:

Ergativity is a term used in traditional descriptive and typological linguistics to refer to a system of nominal case-marking where the subject of an intransitive verb has the same morphological marker as a direct object, and a different morphological marker from the subject of a transitive verb. (Comrie, 1978: 329)

In Mankiyali, there are three primary systems of alignment, which is conditioned by the use of the perfect aspect, i.e., split ergativity. In the imperfect aspect the morphosyntactic alignment of a given phrase is invariably nominative-accusative. Thus, in the imperfect, the subject of an intransitive verb is marked in the direct case, with the verb agreeing with the subject. Similarly, in transitive clauses, the agent of an imperfect transitive verb is marked in the direct case, while the patient of the transitive verb may be marked either in the direct in the dative based on pragmatic considerations. In the perfect aspect, there are two systems of alignment in use: an ergative–absolutive and tripartite marking.¹² In the former, the agent of a transitive verb is marked in the ergative, with the patient of a transitive verb and the subject of an intransitive verb marked in the direct case, while in the latter, the dative marks the patient of a transitive verb with an ergative subject.

This system of ergative marking is a hallmark of Indo-Aryan languages, though the specifics of expression vary between languages. Notably, valency appears to be less of a motivator in Mankiyali than it is in other Indo-Aryan languages, with valency and transitivity

¹² Referred to as ‘identified object marking’ by Masica (1981), ‘differential object marking’ by others, including Montaut (2018). While salient in the language, the motivation for use is mostly pragmatic and beyond the scope of this thesis.

effectively synonymous in this language. Example 2, below, demonstrates that ergative marking is possible in Hindi/Urdu in order to express volition in conjunction with a small number of intransitive verbs (Butt, 2001: 122; Bjorkman, 2018), but this is not a structure that is available in Mankiyali, as illustrated in 2.d.

2. Hindi/Urdu Split Intransitivity

- a. राम खँसा राम کھانسا
 raam -Ø kʰās -aa [H/U]
 Ram -DIR cough -PERF.M.SG
 'Ram coughed'
- b. *Raam kʰangu*
 raam -Ø kʰang -u [Mnk]
 Ram -DIR cough.PRET -M.SG
 'Ram coughed (purposefully or not)'
- c. राम ने खँसा राम نے کھانسا
 raam -Ø nee kʰās -aa [H/U]
 Ram -OBL ERG cough -PERF.M.SG
 'Ram coughed (purposefully)'
- d. **Rami kʰangu*
 *ram -i kʰang -u [Mnk]
 *Ram -ERG cough.PRET -M.SG
 *'Ram coughed (purposefully)'

Hindi/Urdu adapted from Butt (2001: 122)

With regards to ergative marking, the Mankiyali system of split ergativity has significant differences from the systems observed in other Indo-Aryan languages, particularly those in the Western zone and Lahnda subgroup of the North-western Indo-Aryan zone as described by Khokhlova and demonstrated in Example 3 (2016: 180-183). Western Indo-Aryan languages employ the instrumental in ergative marking, as demonstrated in 3.a, and North-western languages vary in ergative marking.

3. Morphological Ergative Marking in Gujarati

- a. રાજા એ શત્રુ ને તલવાર એ કાપી નાંખ્યો.

raaḷaa e šatru ne talvaar e kaapii nãākʰyo [G]
 raaḷaa e šatru ne talvaar e kaap -ii nãākʰyo
 Raja INS enemy ACC sword INS hit -ABS throw.PP.M.SG
 'Raja hit the enemy with a sword'

- b. *Raaji duḷvaṇaz tɪlvaaraĩ maar ḡalu*

raaḷ -i duḷvaṇ -a -z tɪlvaar -a -ĩ maar ḡal -u [Mnk]
 Raja -ERG enemy -OBL -DAT sword -OBL -ABL hit AUX -M.SG
 'Raja hit the enemy with a sword'

Gujarati example adapted from Khokhlova (2016)

Ergative marking in Mankiyali is notably distinct from methods of ergative marking in Punjabi and Hindko, which use the oblique (pro)noun to mark ergativity, and for some speakers, the ergative postposition *ne* may optionally be employed (Bashir & Connors, 2019, pp. 244–246). As demonstrated below in Examples 4.i, despite the differences in syntax, the attested system of ergative marking most closely resembling that of Mankiyali is Kashmiri.

4. 'I ate a meal' Cross-Linguistic Comparison

- a. میں روٹی کھادی

mæ roṭi kʰáá -d -i [Hnk]
 1SG.OBL bread.F.SG.DIR eat -PERF -F.SG
 'I ate bread/a meal.'

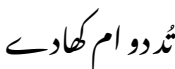
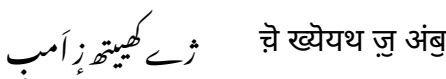
- b. میں کھین ۛے خب ۛن

mε kʰy -av kʰyan [K]
 1SG.ERG eat -3SG.M food.M.DIR
 'I ate a meal'



- c. *mi piɪɖ kʰavu*

mi piɪɖ kʰa -vu [Mnk]
 1SG.ERG food.m.DIR eat.PRET -M.SG
 'I ate a meal'

4.i 'You ate two mangoes' Cross-Linguistic Comparison

- a.  [Hnk]
 tud do am k^háá -d -ee
 2sg.obl two mango.M.PL eat -PERF -M.PL
 'You ate two mangoes'
- b.  [K]
 ce k^hy -eyat^h zì āmb -ì
 2SG.ERG eat -2PL.M.PRET two.DIR mango -DIR.M.PL
 'You ate two mangoes'
- c. *ti du ama k^hivee* [Mnk]
 ti du am -a k^hɪ -vee
 2SG.ERG two mango -DIR.M.PL eat.PRET -M.PL
 'You ate two mangoes'

4.ii 'I ate two mangoes' Cross-Linguistic Comparison

- a.  [P]
 mæ̃ do amb k^háá -d -e
 1SG.OBL two mango.M.PL eat -PERF -M.PL
 'I ate two mangoes'
- b.  [K]
 me k^hy -eyi zì āmb -ì
 1SG.ERG eat -1PL.M.PRET two.DIR mango -DIR.M.PL
 'I ate two mangoes'
- c. *mi du ama k^hivee* [Mnk]
 mi do aam k^hɪ ɣal -vi
 1SG.ERG two.DIR mango.M.PL eat AUX.PST.PERF -M.PL
 'I ate two mangoes'

4.iii 'He/she did a task for me' Cross-Linguistic Comparison

- a. ਉਹ ਨੇ ਮੇਰਾ ਕੰਮ ਕਰ ਦਿੱਤਾ اوہ نے میرا کم کر دتا
- | | | | | | | | | | |
|---------|------|---------|-----------|-----------|-----|------|-------|-------|-----|
| ó | =ne | mer | -aa | kamm | kar | di | -tt | -aa | [P] |
| 3SG.OBL | =ERG | 1SG.GEN | -M.SG.DIR | work.M.SG | do | give | -PERF | -M.SG | |
- 'He/she did my work [i.e., did a task for me].'

- b. तम्य नि यि म्या न्य काम करिथ تمی نیہ میانی کام کر تھ
- | | | | | | | | |
|---------------|------|-----------|--------------|-----------|-----|----------|-----|
| təmʸ | ni | -yi | mʸəənʸ | kəəm | kər | -itʰ | [K] |
| 3SG.INVIS.ERG | take | -PST.F.SG | 1SG.GEN.F.SG | work.F.SG | do | -3SG.PST | |
- 'He/she did my work [i.e., did a task for me].'

- c. *ti mɪɳa kaam kar ɟalu*
- | | | | | | | | |
|---------------|---------|-----------|----------|-----|--------------|-------|-------|
| ti | mɪɳ | -a | kaam | kar | ɟal | -u | [Mnk] |
| 3SG.INVIS.ERG | 1SG.GEN | -M.SG.DIR | workM.SG | do | AUX.PERF.PST | -M.SG | |
- 'He/she did my work [i.e., did a task for me].'

Hindko and Punjabi adapted from Bashir & Connors (2019: 432–433)

Triggers for ergative marking in Mankiyali additionally differ between those seen in other Indo-Aryan languages. The absence of a morphologically expressed future perfect in Mankiyali restricts ergative marking to the realm of past perfect statements.

1.6.1.2 Dative Subjects

The dative subject is a frequent feature in Indo-European languages, and is notably prominent in Indo-Aryan languages specifically. Within the North-western Indo-Aryan context, the dative subject is employed in a variety of ways, as illustrated by Punjabi and Mankiyali in Examples 5.1 through 5.3.

5. Dative Subjects: 'I like my house'

- a. ਮੈਨੂੰ ਆਪਣਾ ਘਰ ਚੰਗਾ ਲੱਗਦਾ ਹੈ। [P]
 مینوں آپنا گھر چنگا لگدا اے۔
- | | | | | | | |
|----------|------|------|-------|-------|------|-------|
| mæ | -nũũ | aapṇ | -aa | kàr | čãg | -aa |
| 1.SG.OBL | -DAT | REFL | -M.SG | house | good | -M.SG |

lag -d -aa e
 seem -IMPF -M.SG be.PRS.3SG
 'I like my house'

- b. *maz apaṇa goṛ šu lagãã* [Mnk]
 ma -z apaṇ -a goṛ šu
 1SG.OBL -DAT REFL -M.SG house good

lag -ãã
 seem -IMPF.PRS.M.SG
 'I like my house'

5.i Dative Subjects: 'My daughter has gotten a fever'

- a. ਮੇਰੀ ਕੁੜੀ ਨੂੰ ਬੁਖਾਰ ਚਾੜ੍ਹਿਆ ਹੈ। [P]
 میری کڑی نوں بخار چڑھیا اے۔
- | | | | | | |
|---------|-------|------|------|------|--------|
| mer | -ii | kuṛ | -ii | =nũũ | buxaar |
| 1SG.GEN | -F.SG | girl | -OBL | =DAT | fever |

čár -iya e
 climb -PERF.M be.PRS.3SG.M
 'My daughter has (gotten) a fever'

- b. *miiṇ tiiz táá¹³ uyat^ho.* [Mnk]
 miiṇ tiiz -z táá uyat^h -o
 1SG.GEN.F.SG.OBL daughter.OBL -DAT fever.DIR climb.PRET -M.SG
 'My daughter has (gotten) a fever'

¹³ Cf. S. <ताप> *taapa* 'heating'; G. <तल्ल> *taav* 'fever'

5.ii Dative Subjects: 'I like Chinese food a lot'

- a. ਮੈਨੂੰ ਚੀਨੀ ਖਾਣਾ ਬਹੁਤ ਪਸੰਦ ਹੈ। مینوں چینی کھانا بہت پسند اے۔ [P]
 mæ -nũũ čiinii kʰaaŋ -aa bót pasand e
 1sg -DAT Chinese food -DIR very like be.PRS.3SG.M
 'I like Chinese food a lot'

- b. maz čiinii kʰaŋa lak pasand u [Mnk]
 ma -z čiinii kʰaŋ -a pasand u
 1sg.obl -DAT Chinese food -DIR like be.PRS.M.SG
 'I like Chinese food a lot'

5.iii Dative Subjects: 'We got angry'

- a. ਸਾਡੀ ਗੁੱਸਾ ਆਯਾ। سانوں غصہ آیا۔ [P]
 saa -nũũ gussaa aa -yaa
 1PL.OBL -DAT anger come -PERF.M.SG
 'We got angry'

- b. amaz rož uyaṯʰo [Mnk]
 am -a -z rož¹⁴ uyaṯʰ -o
 1PL -OBL -DAT anger.DIR climb.PRET -M.SG
 'We got angry'

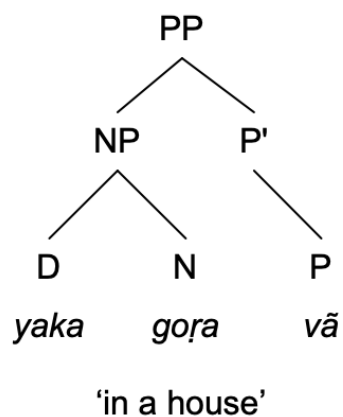
Punjabi examples adapted from Bashir & Connors (2019: 447-449)

1.6.1.3 The Postpositional Phrase

The Mankiyali postpositional phrase is typologically similar to that of other Indo-Aryan languages. The distinction between postpositional phrase and case ending, as outlined in 1.5 Organization of the Thesis, rests on assignment of cases. The Mankiyali postposition is thus considered distinct from the noun case system in that case endings are assigned by another element such as another noun, postposition, or a verb, while postpositions assign the oblique or ablative case to the noun they modify (see Chapter 4: Postpositions). Figure 3 provides a tree diagram of a postpositional phrase.

¹⁴ Cf. S. (ईर्ष्या) *iirṣyaa* 'jealousy'; N. (रिस) *ris* 'anger' (Turner, 1962, p. 73)

Figure 3: The Mankiyali Postpositional Phrase



1.6.1.4 The Verb Phrase

The verb phrase in Mankiyali consists of a wide array of auxiliary forms that are employed to express aspectual and modal distinctions. The maximal structure of the Mankiyali verb corresponds to the system of NIA verbs outlined by Masica:

Figure 4: Structure of the Mankiyali Verb

VERB STEM + Aspect Marker + (CONCORD) + Tense Marker
Mood Marker + (CONCORD)

However, the structure outlined by Figure 4 is somewhat concealed in Mankiyali by the coalescence of the aspect marker with the verb stem in the preterite, resulting in a surface presentation (Figure 5) that is more fusional than Figure 4 implies, with an unmarked imperfect stem and a marked perfect stem.

Figure 5: Comparative Structure of the Perfect Past, Imperfect Past, and Preterite of *karaṇa* 'to do'

kar yalu āāzu 'do.PERF.PST.M.SG' ((he) has done)

VERB STEM		PERF		M.SG		PST		M.SG
∅								
kar	+	yal	+	u	+	āāz	+	u

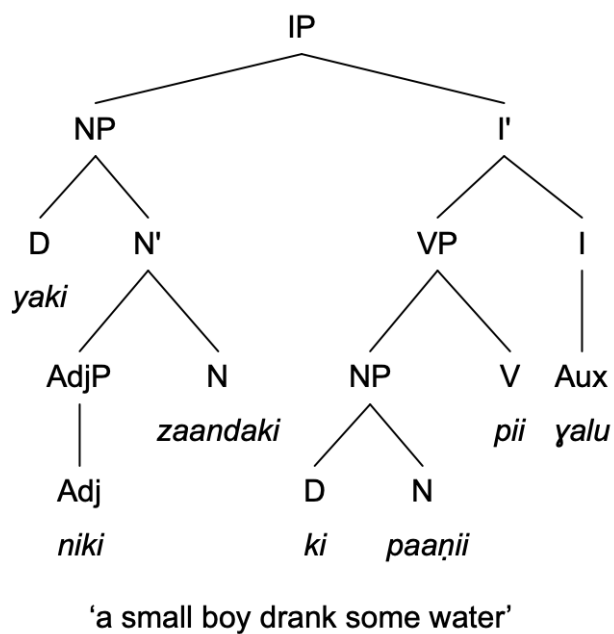
karāāzō 'do.IMPF.PST.M.SG' ((he) was doing)

VERB STEM		IMPF				PST		M.SG
∅								
kar	+	āā	+	∅	+	z	+	ō

kiṛo 'do.PRET.M.SG' ((he) did)

VERB STEM				M.SG				
PRET								
kiṛ	+	o	+	∅	+	∅	+	∅

Figure 6: Tree Diagram of a Mankiyali Sentence



1.2 Methodology

This thesis relies primarily on natural discourse collected from members of the Mankiyali speech community. Schnell posits that elicitations are useful in compilation of complete constructions that may not be evident in less-controlled speech acts (Schnell,

2018, p. 174). Every effort was made to source observations from natural conversations over elicitations, with the latter serving to complete gaps in paradigms observed in less-structured data. Additionally, the analytical framework was structured secondarily around comparative analysis to closely-related languages, as was put forth by Bower as a useful structure for fieldworkers (2018: 206).

Texts used in this analysis are part of the database for the documentation project headed by Munshi, and will be included in the Mankiyali Language Resource, a digital corpus of Mankiyali linguistic materials, part of the Computational Resource for South Asian Languages (CoRSAL). This archive aims to preserve linguistic data from minority and under-resourced languages in South Asia (CoRSAL, 2022). Unless otherwise indicated, Kashmiri data were elicited from Sadaf Munshi in personal communication.

1.3 Transcription Key

In keeping with conventions employed in South Asian linguistic research (1993: xv), as well as prior work on Mankiyali (Paramore, 2020: 5), the following symbols which differ from the International Phonetic Alphabet standard are used in transcription:

- Retroflex consonants employ a dot below the symbol: [ɖ̣], [ɗ̣], [ɳ̣], [ɽ̣]
- Dental and alveolar consonants are unmarked: [t], [d], [n], [r]
- [c] is used for the voiceless alveolar affricate (IPA: [t͡s]).
- Háček (also known as carons) are used to transcribe fricatives and affricates that occur in a post-alveolar environment: i.e., [č] in place of [t͡ʃ], [ʝ] in place of [d͡ʒ], and [š] and [ž] over [ʃ] and [ʒ], respectively.
- Vowel length is marked by doubling the grapheme in order to avoid the visual clutter that would occur with a long tonal nasal vowel (i.e., [túú] is preferred over [tũ̃])

- High tone, is indicated by an acute accent over the relevant vowel (as in [kár] ‘watch’). When long, tone marking is doubled with the vowel (as in [túú], above). Low tone is unmarked (*pít* ‘door’; *pít* ‘bitter.F.SG.DIR’ & *paal* ‘precaution’; *páál* ‘see.IMP.SG’)

Transcriptions in citations have additionally been regularized to conform with the conventions of this thesis. A full transcription guide is provided in Appendix A.

1.5 Organization of the Thesis

This thesis is organized into seven chapters. Chapter 1 is an introductory chapter, establishing the background of the Mankiyali language. Chapter 2 covers noun morphology and case marking; Chapter 3 covers the morphology of adjectives and adverbial modification. Chapter 4 details postpositional modification. In this thesis, postpositions are assigned to CHAPTER 4 for discussion when they form a case ending that is not assigned case by another element. Chapter 5 describes verb morphology.

1.6 Summary

While overall Mankiyali displays typological patterns that provide clues to the methods in which inflectional morphology will manifest, there are a number of anomalies, including the lack of availability of certain ergative constructions in the intransitive, and the more fusional nature of verb conjugations that necessitate a detailed examination of Mankiyali inflectional morphology.

CHAPTER 2

NOUNS AND PRONOUNS

Mankiyali noun morphology is defined by a robust system of agreement and case marking. In nouns and pronouns, the Old Indo-Aryan masculine–feminine–neuter, singular–dual–plural, eight case system collapsed by the MIA period. Further phonological change, including the loss of final short vowels, resulted in a number of phenomena arising to meet the functional needs of the case endings that were no longer phonologically distinct. Ultimately this resulted in the modern NIA distinction between the direct case (a fusion of the nominative and accusative) and all of the oblique cases except the instrumental coalescing into a single case with their functions expressed through postpositions. This is what's termed the layered case system, outlined in Figure 7, in which there are up to three distinct layers of case suffixes and one layer of postpositions that convey the function of case.

Figure 7: Mankiyali Layered Case System

STEM	LAYER I	LAYER II	LAYER III
cuuk ^h uur	-∅		
animal	-DIR.M.SG		
'the/an animal'			
STEM	LAYER I	LAYER II	LAYER III
cuuk ^h ur	-a		
animal	-OBL.M.SG		
'the/an animal'			
STEM	LAYER I	LAYER II	LAYER III
cuuk ^h ur	-a	-ĩ	
animal	-OBL.M.SG	-ABL	
'from the/an animal'			
STEM	LAYER I	LAYER II	LAYER III
cuuk ^h ur	-a	-ĩ	baad
animal	-OBL.M.SG	-ABL	after
'after the/an animal'			

Which case endings function on a given case layer vary between languages, and the system is thus useful in comparative analysis. The result of this development in NIA languages is evident in Mankiyali, presenting as a modern system of distinction consisting of masculine–feminine, singular–plural, and seven cases: four Layer I cases and three Layer II cases. Pronouns and nouns decline slightly differently from each other, with all pronouns lacking distinct vocative case declensions. Layer I case endings in Mankiyali consist of the direct, oblique, ergative and vocative in Mankiyali. The inflectional paradigms of direct, oblique, ergative and vocative cases are notably more morphologically complex than the Layer II cases. Layer II case endings include the dative, ablative, and genitive cases. The direct, oblique, and ergative cases are instrumental in classifying nouns into declensional paradigms.

2.1 Case Morphology and Noun Classes

This section begins by providing a classification scheme for inflectional paradigms of Mankiyali nouns based on attested morphological patterns in Section 2.1.1 Noun Classes. This is followed by a description of the various functions of Layer I cases in Section 2.2.2 Layer I Cases. Section 2.2.3 Layer II Cases discusses the formation and function of the Layer II case suffixes.

2.1.1 Noun Classes

Nouns in Mankiyali appear to broadly fall into five declensional paradigms based on the surface forms they exhibit when declined. The morphological processes involved in Mankiyali noun case formation are distinct from those observed in Lahnda languages; two types of vowel mutation are productive morphological processes in Mankiyali: stem-final and stem-internal. The former is a distinguishing characteristic of Class I and IV nouns, with the latter defining Class II nouns. Both of these processes are discussed in detail in the

relevant sections on each class. Additionally, presentation of a distinct Layer I ergative case ending which appears to be, as in Kashmiri, a relic of the OIA instrumental, sets Mankiyali noun paradigms apart from those in contact languages.

2.1.1.1 Class I Nouns

Class I nouns are invariably masculine. These nouns undergo stem-final vowel mutation to [-i] in formation of the oblique, ergative, and vocative, with reduction of the underlying /i/ to the semivowel [y] in the oblique and ergative plurals, as well as the vocative singular and plural. Table 4 provides a complete paradigm of Layer I inflection of Class I nouns.

Table 4: Class I Noun Paradigms

		DIR	OBL	ERG	VOC
'husband'	M.SG	zaṇa	zaṇi	zaṇi	zaṇya
	M.PL	zaṇi	zaṇyō	zaṇyō	zaṇyĩĩ
'donkey'	M.SG	k ^h oota	k ^h ooti	k ^h ooti	k ^h ootya
	M.PL	k ^h ooti	k ^h ootyō	k ^h ootyō	k ^h ootyĩĩ

2.1.1.2 Class II Nouns

Class II nouns are either masculine or feminine, and are defined by an extensive system of vowel shift in the stem when declined. When declined for plurality, or into the oblique or ergative singular, the final syllable of these nouns will mutate to [ee], [ɪ(ɪ)], or [i(i)] depending on the vowel in the direct. In Mankiyali, vowel mutation is characterized by fronting and raising of the vowel. Since [ɪ(ɪ)] and [i(i)] are near-close, and close front vowels respectively, they cannot be further fronted or raised. As illustrated by Table 5, below, if a final syllable has a nucleus that cannot mutate, as in *ḍaakii*, 'postman.M.SG.DIR'; *ḍeekii* 'postman.M.PL.DIR', the next-closest syllable with a mutable vowel will shift instead.

Table 5: Class II Noun Paradigms

		DIR	OBL	ERG	VOC
'ox'	M.SG	goo	gII	gII	gIIya
	M.PL	gII	gIIyõ	gIIyo	gIIyĩĩ
'postman'	M.SG	ḍaakii	ḍeekii	ḍeekii	ḍeekiya
	M.PL	ḍeekii	ḍeekyõ	ḍeekyõ	ḍeekiyĩĩ
'mother'	F.SG	maal	meel	meel	meelya
	F.PL	meel	meelyõ	meelyõ	meelyĩĩ
'grandmother'	F.SG	naaṇ	neenṇ	neenṇ	neenya
	F.PL	neenṇ	neenṇyõ	neenṇyõ	neenṇyĩĩ

Class II nouns further have a vowel harmony rule in words with two adjacent syllables with either /u/ or /uu/ as the syllabic nucleus: the expected plural of a Class IV noun with the structure (C)u(:)Cu(:)(C) would be *(C)u(:)Ci(:)(C), following the pattern attested in *lungaar* 'fox.F.SG.DIR'; *lungeer* 'fox.F.PL.DIR'. However, in words with the aforementioned syllabic structure, both nuclei shift: *kucuur*¹⁵ 'bitch.F.SG.DIR'; *kiciir* 'bitch.F.PL.DIR, *kuukuur*¹⁶ 'hen.F.SG.DIR'; *kiikiir* 'hen.F.PL.DIR'.

2.1.1.3 Class III Nouns

Class III nouns are either masculine or feminine and are characterized by a direct singular ending in a consonant, a direct plural identical to the oblique singular ending in /-a/, an oblique plural that is phonologically identical to the ergative plural ending in /-õ/, and a distinct ergative singular suffix /-i/.

¹⁵ Cf. S. <कुचुर> *kuččura* 'dog' (Turner, 1962: 164)

¹⁶ Cf. S. <कुक्कुट> *kukkuṭa* 'cock' (Turner, 1962: 164)

Table 6: Class III Noun Paradigms

		DIR	OBL	ERG	VOC
‘animal’	M.SG	cuuk ^h uur	cuuk ^h ura	cuuk ^h uri	cuuk ^h urya
	M.PL	cuuk ^h ura	cuuk ^h urõ	cuuk ^h urõ	cuuk ^h uryĩĩ
‘traveler’	M.SG	mosaafar	mosaaf(a)ra	mosaaf(a)ri	mosaafarya
	M.PL	mosaafara	mosaaf(a)rõ	mosaaf(a)rõ	mosaafaryĩĩ
‘sun’	M.SG	diz	diza	dizi	dizya
	M.PL	diza	dizõ	dizõ ¹⁷	dizyĩĩ
‘snake’	F.SG	saap	sapa	sapi	sapee ¹⁸
	F.PL	sapa	sapõ	sapõ	sapĩĩ
‘wolf’	F.SG	šarmax	šarmaxa	šarmaxi	šarmaxya
	F.PL	šarmaxa	šarmaxõ	šarmaxõ	šarmaxyĩĩ

These nouns are additionally characterized by obligatory vowel length reduction in the stem in cases other than the direct singular, i.e., when the syllable structure of the direct singular is (C)V:CV:C. As demonstrated in Table 6, *cuuk^huur* ‘animal.M.SG.DIR’ *cuuk^hura* ‘animal.M.SG.OBL’. These changes may be motivated by phonotactic constraints in Mankiyali. There is optional vowel epenthesis in the penultimate syllable in non-direct, cases when the syllabic structure is ((C)V(:))CVC, as in *mosaafar* ‘traveller.M.SG.DIR’ which may alternately present as *mosaafra* or *mosaafara* ‘traveller.M.SG.OBL’; this epenthesis is blocked in the vocative, *mosaafarya* ‘traveller.M.SG.VOC’ as Mankiyali does not permit triconsonantal clusters (Paramore, 2020, p. 34).

2.1.1.4 Class IV Nouns

Class IV nouns, much as Class I nouns, are invariably masculine nouns. The defining characteristic of this class is an identical direct and oblique case ending in both the singular and plural ending in a long [-aa]. Class IV nouns are solely marked for the ergative, wherein the ergative singular is suffixed with [-ee] and the ergative plural presents as the suffix [-iõ].

¹⁷ This form is theoretically possible, but is not used in practice.

¹⁸ Bilabial consonants in the stem block the /-y-/ in the vocative suffixes from surfacing.

It is likely that these nouns would have an oblique singular ending represented by [-a], and an oblique plural [-õ] but the sequences *[-aaa] and *[aaõ] are not permitted phonologically. Class IV nouns are mostly loanwords, with the nouns illustrated in Table 7 ultimately being borrowed into Mankiyali from Persian, Pashto, and Urdu, respectively¹⁹.

Table 7, below, provides a full paradigm for Class IV nouns.

Table 7: Class IV Noun Paradigms

		DIR	OBL	ERG	VOC
'king'	M.SG	baadšaa	baadšaa	baadšee	baadšaa
	M.PL	baadšaa	baadšaa	baadšiõ	baadšaa
'uncle'	M.SG	kaakaa	kaakaa	kaakee	kaakaa
	M.PL	kaakaa	kaakaa	kaakiõ	kaakaa
'fort'	M.SG	kaalaa	kaalaa	kaalee	kaalaa
	M.PL	kaalaa	kaalaa	kaaliõ	kaalaa

2.1.1.5 Class V Nouns

Class V nouns encompass all nouns that have neither a distinct singular oblique nor a distinct singular ergative. These nouns may be either masculine or feminine, and are of diverse origin. These nouns differ from Class IV nouns by having a direct singular and plural, oblique singular, and ergative singular form identical to one another. Table 8 demonstrates the paradigm described above.

¹⁹ Compare with Pers. *paadešaa(h)* (پادشاه) 'king', Psh. *kaakaa* (کاکا) 'uncle', and Urdu *kilaa* (قلعہ) 'fortress' from Ar. *qalʿa(-tun)* (قَلْعَة), respectively

Table 8: Class V Noun Paradigms

		DIR	OBL	ERG	VOC
'sister's son'	M.SG	xvarII	xvarII	xvarII	xvarII
	M.PL	xvarII	xvariŷõ	xvariŷõ	xvariŷĩĩ
'deer'	F.SG	harnii	harnii	harnii	harnii
	F.PL	harnii	harniiŷõ	harniiŷõ	harniiŷĩĩ

2.2.2 Layer I Cases

The previous section discussed the formation of the Layer I cases; this section describes their function in Mankiyali.

2.2.2.1 The Direct

The direct case arose from a coalescence of the Middle Indo-Aryan nominative and accusative (Masica, *The Indo-Aryan Languages*, 1993). The Mankiyali direct case marks the agent or patient of imperfect transitive verbs, as well as the argument of intransitive sentences. The following table provides the direct case paradigms for *zaṇa* 'man, husband', *ḍaakii* 'postman', *maal* 'mother', *cuuk^huur* 'animal', *saap* 'snake', *baadṣaa* 'king', *xvarII* 'sister's son', and *harnii* 'deer'.

Table 9: Nominal Direct Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaṇa	ḍaakii	cuuk ^h uur	baadṣaa	xvarII
M.PL	zaṇi	ḍeekii	cuuk ^h ura	baadṣaa	xvarII
F.SG	—	maal	saap	—	harnii
F.PL	—	meel	sapa	—	harnii

Below, Example 6 provides two sentences highlighting the use of the direct case in nouns.

The direct case occurs relatively frequently and is seen in both intransitive and transitive clauses.

6. Examples of the Direct Case

- a. *niir žĩ vɪɪli žɪ aav.*
niir **-∅** **žĩ** **vɪɪl** **-i** **žɪ** **aav**
sleep **-DIR** **which** **time** **-DIR.PL** **PTCL** **come.PRET.F.SG**
 ‘During the time when sleep came’
- b. *hɪ pari páál gor̩ u*
hɪ **pari** **páál** **gor̩** **-∅** **u**
3SG.DIST.DIR **there** **see.IMP.SG** **house** **-DIR.M.SG** **be.IMP.F.PRS.M.SG**
 ‘See, there is a house’

2.2.2.2 The Oblique

The Mankiyali oblique case serves as a stem for Layer II case endings and postpositions. It arose from the collapse of the Middle Indo-Aryan ablative, genitive, dative, and locative which are collectively termed ‘oblique cases’ by Bloch (1965) and Masica (1993). The oblique case is additionally employed in adverbial derivation. The following table provides the oblique case paradigms for *zaŋa* ‘man, husband’, *ḍaakii* ‘postman’, *maal* ‘mother’, *cuuk^huur* ‘animal’, *saap* ‘snake’, *baadšaa* ‘king’, *xvarɪɪ* ‘sister’s son’, and *harnii* ‘deer’.

Table 10: Nominal Oblique Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaŋi	ḍeekii	cuuk ^h ura	baadšaa	xvarɪɪ
M.PL	zaŋyõ	ḍeekyõ	cuuk ^h urõ	baadšaa	xvarɪyõ
F.SG	—	meel	sapa	—	harnii
F.PL	—	meelyõ	sapõ	—	harniyõ

The use of the oblique case is highlighted in Example 7. Below, both oblique constructions highlighted involve postpositional phrases.

7. Examples of the Oblique Case

- a. *ma laahora mazar yasiin mila vā kaam karāāzō*
 ma **laahor** -a mazar **yasiin.mil** -a vā kaam
 1SG.DIR **Lahore** -OBL inside **Yaseen.Mill** -OBL in work
- kar -āā -zō
 do -IMPF -M.SG
 'I was working in Lahore, in Yaseen Mill'
- b. *poraanī zamaanī vā yak baaštaa aazū*
 poraan -i **zamaan** -i vā yak
 old -OBL.M.SG **time** -OBL.SG in one
- baaštaa -Ø aazū
 king -DIR be.IMPF.PST.M.SG
 'Long ago (lit., In olden times) there was a king'

2.2.2.3 The Ergative

As discussed in Section 1.6.1.1, the Mankiyali ergative case surfaces in the past perfect and preterite exclusively. The Mankiyali ergative case suffix is morphologically unusual, and marking in classes I, II, and V is identical to the oblique. Nevertheless, the presence of a distinct ergative singular in Classes III and IV and a distinct ergative plural in Class IV, as well as its coalescence with the oblique in Classes I, II, and V raise questions regarding the ultimate origin of this case ending. Bloch notes that the OIA instrumental survives to varying degrees in a number of languages, often conveying an ergative function (1965: 171). The following table provides the ergative case paradigms for *zaṇa* 'man, husband', *ḍaakii* 'postman', *maal* 'mother', *cuuk^huur* 'animal', *saap* 'snake', *baadšaa* 'king', *xvarɪɪ* 'sister's son', and *harnii* 'deer'.

Table 11: Nominal Ergative Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaṇi	ḍeekii	cuuk ^h uri	baadšee	xvarɪɪ
M.PL	zaṇyō	ḍeekiyyō	cuuk ^h urō	baadšīō	xvarɪyō
F.SG	—	meel	sapi	—	harnii
F.PL	—	meelyō	sapō	—	harniyō

Example 8 provides phrases using the ergative. Note that *baaštaa* and *baadšaa* are both ‘king’ in Mankiyali, with the former a nativized form, but both are ultimately lonewords.

8. Examples of the Ergative

a. *baaštee hɪ loʀeevi.*

baaštaa	-i	hɪ	loʀee	-vĩ
king	-ERG.SG	3SG.DIST.DIR	call.PRET	-F.SG
‘The king called for her.’				

b. *meel pɪɪɔ kʰɪ ɣalu.*

meel	pɪɪɔ	-∅	kʰɪ	ɣal	-u
mother.ERG.SG	food	-DIR.SG	eat	AUX.PERF.PST	-M.SG
‘The mother ate the food’					

2.2.2.4 The Vocative

The Mankiyali vocative case is notable in being a Layer I case ending, which contrasts with Punjabi and Hindko where vocative nouns are expressed through a Layer II case (Bashir & Conners, 2019). The vocative case in Mankiyali initially appears to be consistent with a Layer II case ending, with Class II and Class III nouns undergoing the stem vowel shift or epenthesis expected in formation of the oblique stem, respective to considerations of noun class. However, the morphology of the vocative case suffix in Mankiyali is distinct in that the choice of suffix in the singular is dependent on gender of the noun it is suffixed to. This would be unexpected of a Layer II case (see Section 2.2.3 Layer II Cases). The following table provides the direct case paradigms for *zaŋa* ‘man, husband’, *ɖaakii* ‘postman’, *maal* ‘mother’, *cuukʰuur* ‘animal’, *saap* ‘snake’, *baadšaa* ‘king’, *xvarɪɪ* ‘sister’s son’, and *harnii* ‘deer’.

Table 12: Nominal Vocative Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaṇya	ḍeekya	cuuk ^h urya	baadṣaa	xvarɪɪ
M.PL	zaṇyɪɪ	ḍeekyɪɪ	cuuk ^h uryɪɪ	baadṣaa	xvarɪyɪɪ
F.SG	—	meelyee	sape	—	harnii
F.PL	—	meelyɪɪ	sapɪɪ	—	harniyɪɪ

The vocative is the most infrequent Layer I case in Mankiyali. It may occur with or without a particle, as demonstrated below by examples 9.b and 9.a, respectively.

9. Examples of the Vocative Case

- a. *am manju ‘zaṇya! am ai duvō bok kɪɪla u, ha koɪ yā na.’*

am	manj	-u	zaṇ	-ya	am	ai	du	-ō	bok
1pl.dir	say.PRET	-M.SG	man	-voc	1pl.dir	EMPH	two	-OBL	book

kɪɪl	-a	u	ha	koɪ	yā	na
do.PTCP	-M.SG	be.IMPF.PRS.M.SG	and	someone	come.FUT.M.SG	NEG

‘We said, ‘Oh man, we booked [the flight] and nobody else will come’.’

- b. *o kuṛɪɪlyee tu čaa karaĩ?*

o	kuṛɪɪ	-yee	tu	čaa	kar	-aĩ
PTCL	girl	-voc.F.SG	2SG.DIR	what	do.IMPF	-PRS.F.SG

‘Hey lady, what are you doing?’

2.2.3 Layer II Cases

Within an Indo-Aryan context, Layer II cases consist of affixes that convey the meaning of case, but are mostly etymologically distinct from cases inherited directly from OIA. Layer II cases attach to the oblique stem and are mostly ultimately derived from postpositions that have undergone grammaticalization in NIA. Indeed, a number of inherently historical postpositions have undergone a degree of phonological reduction to the point that they have completely fused onto the noun. Mankiyali Layer II case endings consist of the dative, ablative, and genitive; adjectives modifying nouns in these cases are invariably oblique adjectives. The ablative is restricted to a single case suffix, *-ĩ*, and the

dative surfaces either as underlying -z or as a clitic =zi. The extreme variation in the surface forms of the genitive suffix is triggered by obligatory concord with Layer I case and grammatical gender of the possessee.

Table 13: Summary of Layer II Case Suffixes

	DAT	ABL	GEN
SG	-z, -az, =zi	-ĩ	-ŋ-
PL	-z, -az =zi	-ĩ	-ŋ-

2.2.3.1 The Dative

The dative alternately surfaces as a suffix -(a)z, with an optional epenthetic vowel between the stem and the suffix, or as a clitic =zi that follows the oblique noun that is considered a separate word by speakers. The choice regarding whether the suffix will be used or the clitic appears to be partially motivated by phonological conditions, and additionally by pragmatic considerations.

The dative is a notably salient case in Mankiyali. The case conveys both a dative and accusative function; consequently, some authors refer to it as the dative–accusative (Bashir & Conners, 2019). The following table provides the dative case paradigms for *zaŋa* ‘man, husband’, *ɖaakii* ‘postman’, *maal* ‘mother’, *cuuk^huur* ‘animal’, *saap* ‘snake’, *baadšaa* ‘king’, *xvarɪɪ* ‘sister’s son’, and *harnii* ‘deer’.

Table 14: Dative Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaŋiz	ɖeekiiz	cuuk ^h uraz	baadšaaaz	xvarɪɪz
	zani zi	deekii zi	cuuk ^h ura zi	baadšaa zi	xvarɪɪ zi
M.PL	zaŋyõ	ɖeekiyyõz	cuuk ^h urõz	baadšaaaz	xvarɪyõz
	zaŋyõ zi	ɖeekiyõ zi	cuuk ^h urõ zi	baadšaa zi	xvarɪyõ zi
F.SG	—	meelaz	sapaz	—	harniiz
	—	meel zi	sapa zi	—	harni zi
F.PL	—	meelyõz	sapõz	—	harniyõz
	—	meelyõ zi	sapõ zi	—	harniyõ zi

Example 10 provides two functions of the dative case. In 10.a, the suffix functions as a true dative in *pučaz* ‘to [his] son’. Conversely, in 10.b, *tılvaaraz* ‘the sword’ displays this suffix’s accusative function.

10. Examples of the Dative Case

- a. *ti čaa kiř baaštee yak yak ʃisaar apaņi yaka pučaz dit*
 ti čaa kiř -a baaštaa -i yak ~yak ʃisaar
 3SG.INVIS.ERG what do.PRET -M.SG king -ERG.SG one.DIR ~REDUP stick.DIR
- apaņ -i yak -a ~yak -a **puč** -a -z
 own -OBL.M.SG one -OBL ~REDUP -OBL **son** -OBL.SG -DAT
- dit
 give.PRET.F.SG
 ‘What the king did was he gave one stick to each of his sons’
- b. *ti manju ‘na yara koi ʃiim-ʃiim na u tılvaaraz aņya yara’*
 ti manj -u na yara koi ʃiim ~ʃiim
 3SG.INVIS.ERG say -PST.M.SG NEG PTCL INDEF time ~REDUP
- na u **tılvaar** -a -z aņ -ya yara
 NEG be.IMP.F.PRS.M.SG **sword** -OBL -DAT bring -IMP.PL PTCL
- ‘He said ‘there’s no time, bring me the sword’.

2.2.3.2 The Ablative

The ablative case is a simple /-ĩ/ suffix attached to the oblique stem of nouns. This single case suffix, as with the dative, serves a dual function, either conveying an ablative or instrumental meaning. The following table provides the ablative case paradigms for *zaņa* ‘man, husband’, *ḍaakii* ‘postman’, *maal* ‘mother’, *cuuk^huur* ‘animal’, *saap* ‘snake’, *baadšaa* ‘king’, *xvarıı* ‘sister’s son’, and *harnii* ‘deer’.

Table 15: Ablative Case Paradigms

	Class I	Class II	Class III	Class IV	Class V
M.SG	zaņĩ	ḍeekiiyĩ	cuuk ^h uraĩ	baadšaaĩ	xvarıyĩ
M.PL	zaņyõĩ	ḍeekiiyõĩ	cuuk ^h urõĩ	baadšıõĩ	xvarıyõĩ
F.SG	—	meelĩ	sapaĩ	—	harniyĩ
F.PL	—	meelyõĩ	sapõĩ	—	harniyõĩ

Nouns in the ablative may additionally serve an adverbial function, as in *farzaĩ* ‘in the morning’. The ablative does not map perfectly with the instrumental, as illustrated below in Example 11.b, where postpositions are used in conjunct with vehicles.

11. Examples of the Ablative Case

- a. *muyrĩ farzaĩ am vaxti žĩ thu ti aavi.*
 muyrĩ **farz** -a -ĩ am vaxti žĩ thu ti aavi
 first.OBL **morning** -OBL.SG -ABL 1PL.ERG early PTCL come.PRET.M.PL
 ‘First, we came early in the morning’
- b. *huṭ hĩ páál goṛaĩ koi mooṭarsiikalõ mat tilĩ koi hĩ páál giḍyõ vã tilĩ*
 huṭ hĩ páál **goṛ** -a ĩ koi
 now 3SG.PROX.DIR see.IMP.SG **house** -OBL -ABL which
- mooṭarsiikal -õ mat til -ĩ koi **goṛ** -a ĩ
 motorcycle -OBL.PL on go.IMPF -PRS.PL which **house** -OBL -ABL
- hĩ páál giḍ -yõ vã til -ĩ
 3SG.PROX.DIR see.IMP.SG car -OBL.PL in go.IMPF -PRS.PL
 ‘Now, you see, some people travel from home by motorcycle, you see some travel from home by car’

2.2.3.3 The Genitive

The Mankiyali genitive case agrees with respect to the Layer I case, number, and gender of the possessee. In genitive nouns, the ergative concord overlaps phonologically with the oblique forms. In common with other Layer II cases, the genitive suffix attaches to the oblique stem of the noun, with the morphemes required of gender concord form occasionally eclipsing the final syllable nucleus of the oblique stem (see *baadšiiṇ* king.M.SG>DIR.F.PL in Table 16). The following table provides the genitive case paradigms for *zaṇa* ‘man, husband’, *ḍaakii* ‘postman’, *maal* ‘mother’, *cuuk^huur* ‘animal’, *saap* ‘snake’, *baadšaa* ‘king’, *xvarii* ‘sister’s son’, and *harnii* ‘deer’.

Table 16: Genitive Noun Paradigms

M Possessee	Class I	Class II	Class III	Class IV	Class V
M.SG>DIR.M.SG	zanɪŋa	deekiina	cuuk ^h uraŋa	baadʂaaŋa	xvarɪɪŋa
M.SG>DIR.M.PL	zanɪŋi	deekiini	cuuk ^h uraŋi	baadʂaaŋi	xvarɪɪŋi
M.PL>DIR.M.SG	zanɪŋɔŋa	deekiiyɔŋa	cuuk ^h urɔŋa	baadʂiɔŋa	xvarɪyɔŋa
M.PL>DIR.M.PL	zanɪŋɔŋi	deekiiyɔŋi	cuuk ^h urɔŋi	baadʂiɔŋi	xvarɪyɔŋi
F.SG>DIR.M.SG	—	meelɪŋa	sapaŋa	—	harniina
F.SG>DIR.M.PL	—	meelɪŋi	sapaŋi	—	harniini
F.PL>DIR.M.SG	—	meelyɔŋa	sapɔŋa	—	harniyɔŋa
F.PL>DIR.M.PL	—	meelyɔŋi	sapɔŋi	—	harniyɔŋi
M.SG>OBL.M.SG	zanɪŋi	deekiini	cuuk ^h uraŋi	baadʂaaŋi	xvarɪɪŋi
M.SG>OBL.M.PL	zanɪŋi	deekiini	cuuk ^h uraŋi	baadʂaaŋi	xvarɪɪŋi
M.PL>OBL.M.SG	zanɪŋɔŋi	deekiiyɔŋi	cuuk ^h urɔŋi	baadʂiɔŋi	xvarɪyɔŋi
M.PL>OBL.M.PL	zanɪŋɔŋi	deekiiyɔŋi	cuuk ^h urɔŋi	baadʂiɔŋi	xvarɪyɔŋi
F.SG>OBL.M.SG	—	meelɪŋi	sapaŋi	—	harniini
F.SG>OBL.M.PL	—	meelɪŋi	sapaŋi	—	harniini
F.PL>OBL.M.SG	—	meelyɔŋi	sapɔŋi	—	harniyɔŋi
F.PL>OBL.M.PL	—	meelyɔŋi	sapɔŋi	—	harniyɔŋi
M.SG>VOC.M.SG	zanɪŋya	deekiinya	cuuk ^h uraŋya	baadʂaaŋya	xvarɪɪŋya
M.SG>VOC.M.PL	zanɪŋyɪ	deekiinyɪ	cuuk ^h uraŋyɪ	baadʂaaŋyɪ	xvarɪɪŋyɪ
M.PL>VOC.M.SG	zanɪŋɔŋya	deekiiyɔŋya	cuuk ^h urɔŋya	baadʂiɔŋya	xvarɪyɔŋi
M.PL>VOC.M.PL	zanɪŋɔŋyɪ	deekiiyɔŋyɪ	cuuk ^h urɔŋyɪ	baadʂiɔŋyɪ	xvarɪyɔŋi
F.SG>VOC.M.SG	—	meelɪŋya	sapaŋya	—	harniinya
F.SG>VOC.M.PL	—	meelɪŋyɪ	sapaŋyɪ	—	harniinyɪ
F.PL>VOC.M.SG	—	meelyɔŋya	sapɔŋya	—	harniyɔŋya
F.PL>VOC.M.PL	—	meelyɔŋyɪ	sapɔŋyɪ	—	harniyɔŋyɪ
F Possessee	Class I	Class II	Class III	Class IV	Class V
M.SG>DIR.F.SG	zanɪŋ	deekiin	cuuk ^h uraŋ	baadʂaaŋ	xvarɪɪŋ
M.SG>DIR.F.PL	zanɪŋ	deekiin	cuuk ^h urɪŋ	baadʂɪŋ	xvarɪɪŋ
M.PL>DIR.F.SG	zanɪŋɔŋ	deekiiyɔŋ	cuuk ^h urɔŋ	baadʂiɔŋ	xvarɪyɔŋ
M.PL>DIR.F.PL	zanɪŋɔŋ	deekiiyɔŋ	cuuk ^h urɔŋ	baadʂiɔŋ	xvarɪyɔŋ
F.SG>DIR.F.SG	—	meelɪŋ	sapaŋ	—	harniin
F.SG>DIR.F.PL	—	meelɪŋ	sapɪŋ	—	harniin
F.PL>DIR.F.SG	—	meelyɔŋ	sapɔŋ	—	harniyɔŋ
F.PL>DIR.F.PL	—	meelyɔŋ	sapɔŋ	—	harniyɔŋ
M.SG>OBL.F.SG	zanɪŋ	deekiini	cuuk ^h urɪŋ	baadʂɪŋ	xvarɪɪŋ
M.SG>OBL.F.PL	zanɪŋ	deekiini	cuuk ^h urɪŋ	baadʂɪŋ	xvarɪɪŋ
M.PL>OBL.F.SG	zanɪŋɔŋ	deekiiyɔŋ	cuuk ^h urɔŋ	baadʂiɔŋ	xvarɪyɔŋ
M.PL>OBL.F.PL	zanɪŋɔŋ	deekiiyɔŋ	cuuk ^h urɔŋ	baadʂiɔŋ	xvarɪyɔŋ
F.SG>OBL.F.SG	—	meelɪŋ	sapɪŋ	—	harniin
F.SG>OBL.F.PL	—	meelɪŋ	sapɪŋ	—	harniin
F.PL>OBL.F.SG	—	meelyɔŋ	sapɔŋ	—	harniyɔŋ
F.PL>OBL.F.PL	—	meelyɔŋ	sapɔŋ	—	harniyɔŋ
M.SG>VOC.F.SG	zanɪŋyee	deekiinyee	cuuk ^h urɪŋyee	baadʂɪŋyee	xvarɪɪnyee
M.SG>VOC.F.PL	zanɪŋyɪ	deekiinyɪ	cuuk ^h urɪŋyɪ	baadʂɪŋyɪ	xvarɪɪnyɪ
M.PL>VOC.F.SG	zanɪŋɔŋyee	deekiiyɔŋyee	cuuk ^h urɔŋyee	baadʂiɔŋyee	xvarɪyɔŋi
M.PL>VOC.F.PL	zanɪŋɔŋyɪ	deekiiyɔŋyɪ	cuuk ^h urɔŋyɪ	baadʂiɔŋyɪ	xvarɪyɔŋi
F.SG>VOC.F.SG	—	meelɪŋyee	sapɪŋyee	—	harniinyee
F.SG>VOC.F.PL	—	meelɪŋyɪ	sapɪŋyɪ	—	harniinyɪ
F.PL>VOC.F.SG	—	meelyɔŋyee	sapɔŋyee	—	harniyɔŋyee
F.PL>VOC.F.PL	—	meelyɔŋyɪ	sapɔŋyɪ	—	harniyɔŋyɪ

The Mankiyali genitive is additionally employed in an attributive or adjectival sense, but as this is beyond the scope of this thesis, Example 12 provides sentences using a noun that would be considered genitive rather than a derived adjective.

12. Examples of the Genitive Case

- a. *huṭ hatı vāya **Alaṇa** šukuur u har ki jaan u*

huṭ	hatı	vāya	Ala	-ṇa	šukuur	u
now	this.much	be. PRET.M.SG	Allah	-GEN.M.SG	thanks	be.IMP.F.PRS.M.SG

har	ki	jaan	u
every	thing	enough	be.IMP.F.PRS.M.SG

‘Now, thanks be to Allah, there is enough.’

- b. *yak vaara **niiraṇa** a **baaleeṇa** mokaabla laago*

yak	vaara	niir	-a	-ṇa	ha	baalee	-ṇa
one	time	sleep	-OBL	-GEN.M.SG	CONJ	wind.OBL	-GEN.M.SG

mokaabla	laag	-o
competition	plant.PRET	-M.SG

‘Once there was a competition between sleep and the wind’

2.3 Pronouns

2.3.1 Personal Pronouns

Pronouns do not decline for gender of the referent, but do decline for person, number, and—in the third person—deixis. Below, Table 17 provides the declensional paradigms for personal pronouns.

Table 17: Mankiyali Personal Pronouns

	DIR	OBL	ERG	DAT	ABL
1SG	ma	ma	mi	maz	māĩ
2SG	tu	tu	ti	tuz	tuĩ
3SG.PROX	hĩ	ii	i	iiz	iyĩ
3SG.DIST	hı	ee	i	eez	ēēĩ
3SG.INV	so	taa	ti	taaz	tāāĩ
1PL	am	amõ	am	amõz	amõĩ
2PL	tom	tomõ	tom	tomõz	tomõĩ
3PL.PROX	hĩ	yõõ	yõõ	yõõz	yõĩ

3PL.DIST	hɪ	yõõ	yõõ	yõõz	yõĩ
3PL.INV	so	tyõõ	tyõõ	tyõõz	tyõĩ

adapted from Munshi & Aurangzeb (n.p.)

The forms of the pronouns, both phonologically and in terms of the tripartite deictic distinction, are unusual in the region, and unattested in Hindko (Bashir & Connors, 2019) and Shina (Schmidt & Kohistani, 2008), but parallels are attested in Kashmiri, as illustrated below in Table 18.

Table 18: Kashmiri Direct Case 3rd Person Personal Pronouns

	1	2	3.PROX	3.DIST	3.INV
M.SG	bɪ	cɪ	yi	hu	su
F.SG	bɪ	cɪ	yi	hɔ	sɔ
M.PL	əsʏ	tohʏ	yi	he	so
M.PL	əsʏ	tohʏ	yimɪ	humɪ	timɪ

2.3.2 Possessive Pronouns

Possessive pronouns are morphologically oblique pronouns with the genitive suffix attached. These pronouns decline identically to genitive nouns. Table 19 provides a complete paradigm for possessive pronouns.

Table 19: Mankiyali Possessive Pronoun Paradigms

M.SG.DIR	F.DIR	M.PL.DIR	M.SG.OBL	F.OBL	M.PL.OBL	M.SG.VOC	F.SG.VOC	PL.VOC
mɪɳa	mɪɳɳ	mɪɳɪ	mɪɳɪ	mɪɳɳ	mɪɳɳ	mɪɳya	mɪɳyee	mɪɳyĩĩ
toɳa	toɳɳ	toɳɪ	toɳɪ	toɳɳ	toɳɳ	toɳya	toɳyee	toɳyĩĩ
izaɳa	izaɳɳ	izaɳɪ	izaɳɪ	izaɳɳ	izaɳɳ	izaɳya	izaɳyee	izaɳyĩĩ
azaɳa	azaɳɳ	azaɳɪ	azaɳɪ	azaɳɳ	azaɳɳ	azaɳya	azaɳyee	azaɳyĩĩ
tazaɳa	tazaɳɳ	tazaɳɪ	tazaɳɪ	tazaɳɳ	tazaɳɳ	tazaɳya	tazaɳyee	tazaɳyĩĩ
uɳa	uɳɳ	uɳɪ	uɳɪ	uɳɳ	uɳɳ	uɳya	uɳyee	uɳyĩĩ
tuɳa	tuɳɳ	tuɳɪ	tuɳɪ	tuɳɳ	tuɳɳ	tuɳya	tuɳyee	tuɳyĩĩ
yoɳa	yoɳɳ	yoɳɪ	yoɳɪ	yoɳɳ	yoɳɳ	yoɳya	yoɳyee	yoɳyĩĩ
yoɳa	yoɳɳ	yoɳɪ	yoɳɪ	yoɳɳ	yoɳɳ	yoɳya	yoɳyee	yoɳyĩĩ
tyoɳa	tyoɳɳ	tyoɳɪ	tyoɳɪ	tyoɳɳ	tyoɳɳ	tyoɳya	tyoɳyee	tyoɳyĩĩ

13. Example of the Possessive Pronoun

a. **toŋi** *hataz žĩ šɪ yɪ kɪn*

toŋ -i hat -a -z žĩ šɪ yɪ
2SG.GEN - **OBL.M.SG** hand -OBL -DAT what.DIR thing come.IMP.SG

kɪn

take.IMP.SG

‘Come take what you can get ahold of’

2.3.3 Interrogative Pronouns

Interrogative pronouns in Mankiyali decline for case as do personal pronouns (see Table 20), but many, such as *čaa* ‘what’ are defective, i.e., lacking in forms. Additionally, *kaa* ‘who’, *kala* ‘when’, and *kut* ‘where’ may take a genitive ending, which declines appropriately.

Table 20: Mankiyali Interrogative Pronouns

	DIR	OBL	ERG	DAT	ABL
who	ko	kaa	kis	kaaz	kaaĩ
what	čaa	—	—	—	—
when	kala	kala	—	—	kalāĩ
where	kut	kut	—	kut=zɪ	kutiyĩ
why	kõ	kĩ	—	kĩĩz	kĩyĩ
how	kano	katɪ	—	—	—

Adapted from Munshi & Aurangzeb (n.p.)

14. Examples of Interrogative Pronouns

- a. *kɪtaab ko likʰãã*
 kɪtaab **ko** likʰ -ãã
 book.DIR **who.DIR** write.IMPF -PRS.M.SG
 ‘Who is writing the book?’
- b. *toŋa čaa nãã u?*
 toŋ -a čaa nãã u
 2SG.GEN -M.SG.DIR **what.DIR** name be.IMPF.PRS.M.SG
 ‘What is your name?’
- c. *so kala yala?*
 so **kala** ya -la
 3SG.INVIS.DIR **when.DIR** come.IMPF -FUT.M.3SG
 ‘When will he come?’
- d. *so kut vɪ?*
 so **kut** vɪ
 3PL.INVIS.DIR **where.DIR** be.IMPF.PRS.PL
 ‘Where are they?’
- e. *tom kɪrĩĩč zɪ kō gɪ?*
 tom kɪrĩĩč =zɪ **kō** gɪ
 2PL.ERG Karachi.OBL =DAT **why.DIR** go.PRET.PL
 ‘Why did you go to Karachi?’
- f. *ti hatɪ mazɪdaar baryaani kano kaɾi?*
 ti hatɪ mazɪdaar baryaani **kano** kaɾ -i
 2SG.ERG very delicious.DIR baryaani.DIR **how.DIR** cook.PRET -F.SG
 ‘How did you cook such delicious biryani?’

2.3.3 The Reflexive Pronoun

The Mankiyali reflexive pronoun *apaŋa* is directly cognate with its counterparts in Hindko, as well as other Indo-Aryan languages. Morphologically it derives from MIA *appaa*²⁰ ‘self’ with a genitive suffix.

²⁰ (Turner, 1962: 51)

Table 21: The Mankiyali Reflexive Pronoun

	DIR	OBL	ERG	VOC
M.SG	apaṇa	apaṇi	apaṇi	apaṇya
M.PL	apaṇi	apaṇi	apaṇi	apaṇyĩĩ
F.SG	apaan	apiṇ	apiṇ	apiṇyee
F.PL	apiṇ	apiṇ	apiṇ	apiṇyĩĩ

15. Examples of the Reflexive Pronoun

a. *ma apaṇa nãã likʰãã*

ma **apaṇ** -a nãã likʰ -ãã
 1SG.DIR **own** -DIR.M.SG name write.IMP -PRS.M.SG
 ‘I’m writing my (own) name’

b. *taaz apaṇa kaam karaṇa u*

taa -z **apaṇ** -a kaam kar -aṇa u
 3SG.INVIS.OBL -DAT **own** -DIR.M.SG work do -INF be.IMP.PRS.M.SG
 ‘He has to do his work’

c. *tu huṭ amaz apiṇ zabaana vã koi kisa šuṇi.*

tu huṭ am -a -z **apiṇ** zabaan -a vã koi
 2SG.DIR now 1PL -OBL -DAT **own.OBL.F.SG** tongue -OBL in any

 kis -a šuṇi
 story -M.SG.DIR tell.IMP.SG
 ‘Now tell us a story in your (own) language’

2.3.3 The Relative Pronoun

The relative pronoun *žĩ* ‘whoever, whichever, whatever’ does not take an overt case marking in any instance except for the dative.

Table 22: The Mankiyali Relative Pronoun

	DIR	OBL	ERG	DAT
M.SG	žĩ	žĩ	žĩ	žĩz
M.PL	žĩ	žĩ	žĩ	žĩz
F.SG	žĩ	žĩ	žĩ	žĩz
F.PL	žĩ	žĩ	žĩ	žĩz

16. Examples of the Relative Pronoun

- a. *nuu tyõõ ta piind vā yak mosaafar yanda pašu žĩz garam caadaar palitĩl aazĩ*
 nuu tyõõ ta piind vā yak -∅ mosaafar -∅
 then 3PL.INVIS.ERG that.OBL path.OBL in one -DIR traveller -DIR
- yand- -a paš -u žĩ -z garam -∅
 come.PTCP -M.SG see.PRET -M.SG **whatever.OBL** -DAT warm -DIR.F.SG
- caadaar palitĩl aazĩ
 shawl.DIR.SG wrap.PTCP.F.SG be.IMP.F.PST.F.SG
 ‘They saw a traveller coming on the path who was wrapped in a warm cloak’
- b. *žĩ zaṇ aaz aavo, tazaṇ čaa nãã u?*
 žĩ zaṇ -a aaz aav -o tazaṇ -a
whichever.DIR man -DIR.M.SG today come.PRET -M.SG 3SG.INVIS.GEN -M.SG
- čaa nãã u
 what.DIR name.DIR be.IMP.PRS.M.SG
 ‘Whichever man came today, what was his name?’
- c. *hĩ so zaṇ u žĩz ti mobaail dito*
 hĩ so zaṇ -a u žĩ -z
 3SG.PROX.DIR 3SG.INVIS.DIR man -DIR.M.SG be.IMP.PRS.M.SG **which.OBL** -DAT
- ti mobaail dit -o
 2SG.ERG mobile.phone give.PRET -M.SG
 ‘This is the man who you gave your mobile phone to’

2.3.4 The Indefinite Pronoun

The indefinite pronoun *koɪ* is directly cognate with its counterparts in Punjabi and Hindi/Urdu (both *koi* ‘any’). This pronoun does not overtly decline for case as illustrated by Table 23.

Table 23: The Mankiyali Indefinite Pronoun

	DIR	OBL	ERG
M.SG	koɪ	koɪ	koɪ
M.PL	koɪ	koɪ	koɪ
F.SG	koɪ	koɪ	koɪ
F.PL	koɪ	koɪ	koɪ

17. Example of the Indefinite Pronoun

byaal koɪ aavo

byaal **koɪ** aav -O
yesterday **any** come.PRET -M.SG
‘Someone came (by) yesterday’

2.4 Summary

Nouns and pronouns in Mankiyali behave distinctly from their counterparts in contact languages such as Hindko and Urdu. With respect to Hindko, the distinct ergative case marking and stem-internal internal vowel mutation of stems that occurs in inflection, as well as the differing distribution of nominalizing affixes raise a number of questions regarding the ultimate genetic affiliation of Mankiyali. When compared to Lahnda Indo-Aryan and Hindi/Urdu (Central Indo-Aryan), the coalescence of the Layer II cases with the oblique noun stem, as well as the number of distinct declensional paradigms, and the presence of a distinct Layer I vocative case suffix in all instances except for Class IV and Class V singular is what sets Mankiyali declensional paradigms apart from their cognates in neighboring languages.

CHAPTER 3

ADJECTIVES AND ADVERBIAL MODIFICATION

This chapter describes the inflectional paradigms associated with adjectives, as well as describing adverbial modification. Adverbs are etymologically complex, but their derivation will not be discussed in detail.

3.1 Adjectives

There are three classes of adjectives in Mankiyali. In this thesis, they are designated as Types I, II, and III, respectively. Type I adjectives are obligatorily marked for case, number, and gender of the noun they modify. Type II adjectives solely decline to agree with plurality of the noun they modify. Type III adjectives do not overtly decline to agree with the noun they modify. Adjectives are notably less robust in case marking than nouns, with marked adjectives agreeing with the modified noun in gender, and number, but with distinct forms solely for Layer I cases. Adjectival concord is determined by the noun they modify. A noun in the direct case will take a direct adjective that agrees with the noun in number and gender; a noun in an oblique case (including the oblique case proper and Layer II cases that build on the oblique stem) will surface in the oblique case, again declining to agree with the gender and number of the noun.

3.1.1 Type I Adjectives

Mankiyali Type I adjectives are those that decline for person, case, and number to agree with the noun they modify. These adjectives are almost exclusively inherited from Old Indo-Aryan, or derived from other words using suffixes of Indo-Aryan origin. Adjectives in this class are affected by the same vowel harmony rule as Class II nouns in agreement with feminine nouns. In adjectives with a (C)u(u)Cu(u)C stem, both vowels must change to /i(i)/

in the feminine plural direct, and both the singular and plural of the feminine oblique and vocative.

Monosyllabic Type I adjective stems with syllable nuclei consisting of /aa/ undergo a shift to [ee] in feminine direct plural and in both numbers of the oblique and vocative, with a short nucleus /a/ shifting to [ɪ]. Polysyllabic Type I adjective stems with a final nucleus of /a(a)/ shift to [ɪ(ɪ)] unless the preceding syllable has an /ɪ(ɪ)/ nucleus (cf. *k^haraɾa* ‘rough.M.SG.DIR’ → *k^harɪɪɾ* ‘rough.F.PL.DIR’; *muškiyaala* ‘smelly M.SG.DIR’ → *muškiyeel* ‘smelly.F.PL.DIR’).

All Type I adjective stems with final syllable nuclei in /o(o)/ shift to [ɪ(ɪ)] in agreement with feminine forms other than the direct singular. Type I adjectives with stem-final syllabic nuclei consisting of /ɪ(ɪ)/ or /i(i)/ do not mutate, but do undergo a process of epenthetic vowel lengthening identical to other Type I adjectives. All aforementioned processes are outlined by examples in Table 24.

Table 24: Type I Adjective Paradigms

		DIR	OBL	ERG	VOC
‘black’	M.SG	kaala	kaali	kaali	kaalya
	M.PL	kaali	kaalyō	kaalyō	kaalyĩĩ
	F.SG	kaal	keel	keel	keelyee
	F.PL	keel	keelyō	keelyō	keelyĩĩ
‘new’	M.SG	navã	navĩ	navĩ	navya
	M.PL	navĩ	navyō	navyō	navyĩĩ
	F.SG	nav	niv	niv	nivyee
	F.PL	niv	nivyō	nivyō	nivyĩĩ
‘clean’	M.SG	sutura	suturi	suturi	suturya
	M.PL	suturi	suturyō	suturyō	suturyĩĩ
	F.SG	sutuur	sitiir	sitiir	sitiiryee
	F.PL	sitiir	sitiiryō	sitiiryō	sitiiryĩĩ
‘big’	M.SG	t ^h ɪla	t ^h ɪli	t ^h ɪli	t ^h ɪlya
	M.PL	t ^h ɪli	t ^h ɪlyō	t ^h ɪlyō	t ^h ɪlyĩĩ
	F.SG	t ^h ɪl	t ^h ɪl	t ^h ɪl	t ^h ɪlyee
	F.PL	t ^h ɪl	t ^h ɪlyō	t ^h ɪlyō	t ^h ɪlyĩĩ
‘long’	M.SG	ǰiga	ǰigi	ǰigi	ǰigya
	M.PL	ǰigi	ǰigyō	ǰigyō	ǰigyĩĩ
	F.SG	ǰiig	ǰiig	ǰiig	ǰiigye
	F.PL	ǰiig	ǰiigyō	ǰiigyō	ǰiigyĩĩ

Below, Example 15 demonstrates two Type I adjectives agreeing with the case and gender of the noun they modify. Note that in Mankiyali, the semblative žɪŋa ‘resemble, be like’ is adjectival in contrast with the postpositional semblative found in Central Indo-Aryan languages.

15. Example of a Type I Adjective

yak **nika žɪŋa** zaandaak aazũ.

yak -Ø **nik** -a žɪŋ -a zaandaak -Ø aazũ
 one -DIR **small** -M.SG.DIR **SEMBL** -M.SG.DIR boy -DIR be.IMP.F.PST.M.SG
 ‘There was a little boy’

3.1.2 Type II Adjectives

Type II adjectives do not undergo the stem vowel shifts attested in Type I. These adjectives end in a consonant in the direct singular and do not change form based on gender of the noun. These adjectives are the only class with a distinct ergative suffix, though

it is only distinct in the singular /-i/. The direct plural, oblique singular, and all vocative suffixes are /-a/. The oblique plural and ergative plural suffixes are both /-õ/.

Table 25: Type II Adjective Paradigms

		DIR	OBL	ERG	VOC
'tall'	M.SG	uĉat	uĉata	uĉati	uĉata
	M.PL	uĉata	uĉatõ	uĉatõ	uĉata
	F.SG	uĉat	uĉata	uĉati	uĉata
	F.PL	uĉata	uĉatõ	uĉatõ	uĉata
'wrong'	M.SG	yalat	yalata	uĉati	yalata
	M.PL	yalata	yalatõ	uĉatõ	yalata
	F.SG	yalat	yalata	uĉati	yalata
	F.PL	yalata	yalatõ	uĉatõ	yalata

Example 16 demonstrates the Type II adjective declining for case without an overt gender agreement.

16. Example of a Type II Adjective

So **uĉata** minara vã u

so **uĉat** -a minar -a vã u
 3SG.INVIS.DIR **tall** -OBL tower -OBL in be.IMPF.PRS.M.SG
 'Someone came (by) yesterday'

3.1.3 Type III Adjectives

Type III adjectives consist of those adjectives that do not overtly decline to agree with the noun they modify. This class of adjectives consists both of terms with an Indo-Aryan origin, as well as terms that are ultimately borrowed into Mankiyali from other languages.

Table 26: Type III Adjective Paradigms

		DIR	OBL	ERG	VOC
'good'	M.SG	šu	šu	šu	šu
	M.PL	šu	šu	šu	šu
	F.SG	šu	šu	šu	šu
	F.PL	šu	šu	šu	šu
'correct'	M.SG	saí ²¹	saí	saí	saí
	M.PL	saí	saí	saí	saí
	F.SG	saí	saí	saí	saí
	F.PL	saí	saí	saí	saí
'far'	M.SG	duur	duur	duur	duur
	M.PL	duur	duur	duur	duur
	F.SG	duur	duur	duur	duur
	F.PL	duur	duur	duur	duur

Type III adjectives are the most morphologically simple adjectives in Mankiyali. Example 17 demonstrates that these adjectives do not decline overtly to agree with the modified phrase.

17. Example of a Type III Adjective

- a. hĩ **saí** u
 hĩ **saí** u
 3SG.PROX.DIR correct be.IMP.F.PRS.M.SG
 'This is correct'
- b. **šu** piiš
šu piiš
good cat.PL.DIR
 'good cats'

The presence of distinct vocative case adjective forms is remarkable, and stands in stark contrast with systems of adjectival marking of vocativity attested in other Indo-Aryan languages. Languages in the central and Lahnda subgroup of the North-western clusters employ an oblique adjective in concord with the vocative noun, which is either Layer I (as in

²¹ U. /sahii(h)/ <صحیح>, ultimately from Ar. <صَحِيح> /sʰahiih/

Hindi/Urdu) or II (as in Punjabi or Hindko) respectively. Kohistani Shina employs the direct case adjective with direct case nouns in vocative utterances and are essentially morphologically unmarked (Schmidt & Kohistani, 2008: 40). In contrast, the system of vocative marking on adjectives in Kashmiri is most similar morphologically to that of Mankiyali, with a distinct Layer I vocative noun suffix and a distinct vocative adjectival suffix.

3.2 Adverbs and Adverbial Modification

Adverbs exist as a discrete grammatical category in Mankiyali alongside other categories such as nouns, adjectives, and verbs. Table 27 provides a selection of adverbs without regard for derivational processes. Simple adverbs contrast from postpositional phrases by the fact that adverbs do not assign case.

Table 27: Mankiyali Adverbs

Mankiyali	Gloss
aaz	'today'
aza	'up'
bona	'down'
farza	'tomorrow'
ciir	'early'
huž	'late'
huṭ	'now'
damidami	'slowly'

Mankiyali adverbs serve both spatial and temporal functions. Example 18 demonstrates the inflectional contrast between locative postposition and adverb in Mankiyali.

18. Examples of Mankiyali Adverbs

- a. *taaĩ baad niiraz manju kɪ huṭ apana hat caree*

taa	-ĩ	baad	niir	-a	-z	manj	-u	kɪ	huṭ
3SG.INVIS.OBL	-ABL	after	sleep	-OBL	-DAT	say	-PRET.M.SG	that	now

apana	hat	car	-ee
own.M.SG.DIR	hand.DIR	try.PRET	-PASS.M.SG

After that, sleep was asked to try its hand

- b. *so bona u*
 so **bona** u
 3SG.INVIS.DIR **down** be.IMP.F.PRS.M.SG
 ‘He/she/it is downstairs [lit. down]’

- c. *so aza u*
 so **aza** u
 3SG.INVIS.DIR **up** be.IMP.F.PRS.M.SG
 ‘He/she/it is upstairs [lit. up]’

3.3 Quantifiers and Numerals

3.3.1 Quantifiers

Mankiyali quantifiers cross a number of grammatical categories; they consist of adjectives, numerals, and determiners. The list in Table 28 is not exhaustive, but provides a general overview. Quantifiers do not decline overtly for case, with the exception of *yak* ‘one’ when it serves as an indefinite marker.

Table 28: Mankiyali Quantifiers

Quantifier	Gloss
<i>xaši</i> ²²	‘some’
<i>ki</i>	‘some’
<i>yak</i>	‘one’
<i>koɪ</i>	‘any’
<i>na</i>	‘no, none’

Below, Example 19 illustrates a selection of these quantifiers in context.

²² *ki paan̩ii* and *xaši paan̩ii* (both, ‘some water’) but not **xaši zaandaka* ‘some boys’

19. Examples of Quantifiers

a. *so koi kaam karāā kī na?*

so	koi	kaam	kar	-āā	kī	na
3SG.INVIS.DIR	any	work	do.IMPF	-PRS.M.SG	that	NEG

‘Does he have any job or not?’

b. *kī zaandaka*

kī	zaandak	-a
some	boy	-DIR.PL

‘some boys’

c. *kī paaṇii*

kī	paaṇii	-∅
some	water	-DIR

‘some water’

d. *xašī paaṇii*

xašī	paaṇii	-∅
some	water	-DIR

‘some water’

3.3.2 Cardinal Numerals

Mankiyali numerals follow a vigesimal system: numbers greater than twenty are structured as multiples of twenty (cf. *daž a du biž* ‘fifty (lit., ten-and-two-twenty)’. This system is additionally attested in Burushaski (Munshi, 2018) and some rural varieties of Hindko (Bashir & Connors, 2019). Mankiyali cardinal numerals behave as Class I nouns and decline as such, i.e., they exhibit a distinct oblique singular and plural form, but due to phonological overlap of the oblique plural and ergative plural /-ō/ suffix, the ergative is not distinct from the oblique except for *yaki* ‘one’. Cardinal numerals greater than one are invariably plural except in formation of numerals greater than 20 that take a postposition (cf. 70 and 90 in Table 30).

Table 29
Cardinal Numerals 1-20

	DIR	OBL	ERG
1	yak	yaka	yaki
2	du	duvõ	duvõ
3	čaa	čiyõ	čiyõ
4	coor	covõ	covõ
5	panz	panzõ	panzõ
6	ša	šavõ	šavõ
7	sat	satõ	satõ
8	aṭ ^h	aṭ ^h õ	aṭ ^h õ
9	no	novõ	novõ
10	daž	dažõ	dažõ
11	yaarõ	yaarõ	yaarõ
12	baarõ	baarõ	baarõ
13	teerõ	teerõ	teerõ
14	sodaž	sodažõ	sodažõ
15	pandrõ	pandrõ	pandrõ
16	šooradž	šooradžõ	šooradžõ
17	seyaarõ	seyaarõ	seyaarõ
18	araarõ	araarõ	araarõ
19	uniž	unižõ	unižõ
20	biž	bižõ	bižõ

Table 30
Cardinal Numerals 21-99

	DIR	OBL
21	yak a biž	yak a bižõ
30	daž a biž	daž a bižõ
40	du biž	du bižõ
50	daž a du biž	daž a du bižõ
60	čaa biž	čaa bižõ
70	daža mat čaa biž	daža mat čaa bižõ
80	coor biž	coor bižõ
90	daža mat coor biž	daža mat coor bižõ

As illustrated below in Example 20, cardinal numerals greater than one take the plural form of a noun.

20. Examples of Mankiyali Cardinal Numerals

a. *yaki niki zaandaki xaši paaṇii pii yalu*

yak	-i	nik	-i	zaandak	-i	xaši	paaṇii
one	-ERG	small	-ERG	boy	-ERG	INDEF	water.DIR.M.SG

pii	yal	-u
drink	AUX.PERF.PST	-M.SG

‘A small boy has drunk some water’

b. *coor sangā yaka piṇḍ vā tilīzṽ*

coor	sang	-a	yak	-a	vā	til	-ī	-zṽ
four.DIR	friend	-PL.DIR	one	-OBL	in	go	-IMPF	-PST.PL

‘Four friends were going along a path’

Above 10,000, Mankiyali numerals follow the traditional South Asian division of multiples of hundred-thousands. This system is pervasive regionally, and surfaces in Englishes spoken in South Asia as well as indigenous languages of the region. In local notation, after 10,000, the convention is to separate every two digits as opposed to every three. This thesis will use western digit separators, but South Asian notation will be noted when appropriate.

Table 31 Cardinal Numerals 100 and Greater

	DIR	OBL
100	šaay	šaayõ
101	yak a šaay	yak a šaayõ
1,000	hazaar	hazaarõ
1,001	yak a hazaar	yak a hazaarõ
10,000	daž hazaar	daž hazaarõ
100,000 ²³	lak	lakõ
1,000,000	daž lak	daž lakõ
10,000,000	korooṛ	korooṛõ
100,000,000	daž korooṛ	daž korooṛõ
1,000,000,000	arab	arabõ
1,000,000,000,000	k ^h arab	k ^h arabõ

3.3.3 Ordinal Numerals

Mankiyali ordinal numerals function as adjectives. Aside from *muyṛĩ* ‘first’, which is unmarked for case and thus a Type III adjective, all ordinal numbers behave as Type I adjectives, i.e., they decline for Layer I case, gender, and number of the noun they modify, with identical oblique and ergative forms.

²³ 1,00,000 ‘one lakh’
 10,00,000 ‘ten lakh(s)’
 1,00,00,000 ‘one crore’
 10,00,00,000 ‘ten crore(s)’
 1,00,00,00,000 ‘one arab’
 1,00,00,00,00,000 ‘one kharab’

Table 32: Ordinal Numerals 1-20

	M.SG.DIR	F.SG.DIR	PL.DIR	M.SG.OBL/ERG	F.SG.OBL/ERG	PL.OBL/ERG	M.SG.VOC	F.SG.VOC	PL.VOC
1	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ	muḡrĩ
2	bīra	bīr	bīri	bīri	bīr	bīryō	bīrya	bīryee	bīrĩ
3	čīra	čīr	čīri	čīri	čīr	čīryō	čīrya	čīryee	čīryĩ
4	coṛa	coṛ	coṛi	coṛi	cīr	cīryō	coṛya	cīryee	coṛĩ
5	panzavā	panzāāv	panzāvĩ	panzāvĩ	panzĩiv	panzĩvyō	panzāvya	panzĩyee	panzĩivyĩ
6	šaata	šaāt	šaati	šaati	šeet	šaatyō	šaatya	šeetyee	šeetyĩ
7	sataṽā	sataāāv	satāvĩ	satāvĩ	satĩiv	satāvvyō	satāvya	satĩivyee	satĩivyĩ
8	aṭ ^h avā	aṭ ^h āāv	aṭ ^h āvĩ	aṭ ^h āvĩ	aṭ ^h ĩiv	aṭ ^h āvvyō	aṭ ^h āvya	aṭ ^h ĩivyee	aṭ ^h ĩivyĩ
9	nohavā	nohāāv	nohāvĩ	nohāvĩ	nohĩiv	nohāvvyō	nohāvya	nohĩivyee	nohĩivyĩ
10	dažavā	dažāāv	dažāvĩ	dažāvĩ	dažĩiv	dažāvvyō	dažāvya	dažĩivyee	dažĩivyĩ
11	yáaravā	yáarāāv	yáarāvi	yáarāvi	yáarĩiv	yáarāvvyō	yáarāvya	yáarāvyee	yáarāvyĩ
12	baaravā	baarāāv	baarāvi	baarāvi	baarĩiv	baarāvvyō	baarāvya	baarĩivyee	baarĩivyĩ
13	tīravā	tīrāāv	tīrāvi	tīrāvi	tīrĩiv	tīrāvvyō	tīrāvya	tīrĩivyee	tīrĩivyĩ
14	sodažavā	sodžāāv	sodžāvi	sodžāvi	sodžĩiv	sodžāvvyō	sodžāvya	sodžĩivyee	sodžĩivyĩ
15	pandravā	pandrāāv	pandrāvi	pandrāvi	pandrĩiv	pandrāvvyō	pandrāvya	pandrĩivyee	pandrĩivyĩ
16	šooravā	šoorāāv	šoorāvi	šoorāvi	šooržĩiv	šooržāvvyō	šooržāvya	šooržĩivyee	šooržĩivyĩ
17	seyaaravā	syaarāāv	syaarāvi	syaarāvi	syaarĩiv	syaarāvvyō	syaarāvya	syaarĩivyee	syaarĩivyĩ
18	araaravā	araarāāv	araarāvi	araarāvi	araarĩiv	araarāvvyō	araarāvya	araarĩivyee	araarĩivyĩ
19	unžavā	unžāāv	unžāvi	unžāvi	unžĩiv	unžāvvyō	unžāvya	unžĩivyee	unžĩivyĩ
20	bižavā	bižāāv	bižāvi	bižāvi	bižĩiv	bižāvvyō	bižāvya	bižĩivyee	bižĩivyĩ

Table 33: Ordinal Numerals 21-99

	M.SG.DIR	F.SG.DIR	PL.DIR	M.SG.OBL/ERG	F.SG.OBL/ERG	PL.OBL/ERG	M.SG.VOC	F.SG.VOC	PL.VOC
21	yak a bižavã	yak a bižããv	yak a bižãvi	yak a bižãvi	yak a bižĩiv	yak a bižãvyõ	yak a bižãvyã	yak a bižĩivye	yak a bižĩivvyĩ
30	daž a biž	daž a bižããv	daž a bižãvi	daž a bižãvi	daž a bižĩiv	daž a bižãvyõ	daž a bižãvyã	daž a bižĩivye	daž a bižĩivvyĩ
40	du bižavã	du bižããv	du bižãvi	du bižãvi	du bižĩiv	du bižãvyõ	du bižãvyã	du bižĩivye	du bižĩivvyĩ
50	daž a du bižavã	daž a du bižããv	daž a du bižãvi	daž a du bižãvi	daž a du bižĩiv	daž a du bižãvyõ	daž a du bižãvyã	daž a du bižĩivye	daž a du bižĩivvyĩ
60	čaa bižavã	čaa bižããv	čaa bižãvi	čaa bižãvi	čaa bižĩiv	čaa bižãvyõ	čaa bižãvyã	čaa bižĩivye	čaa bižĩivvyĩ
70	daža mat čaa bižavã	daža mat čaa bižããv	daža mat čaa bižãvi	daža mat čaa bižãvi	daža mat čaa bižĩiv	daža mat čaa bižãvyõ	daža mat čaa bižãvyã	daža mat čaa bižĩivye	daža mat čaa bižĩivvyĩ
80	coor bižavã	coor bižããv	coor bižãvi	coor bižãvi	coor bižĩiv	coor bižãvyõ	coor bižãvyã	coor bižĩivye	coor bižĩivvyĩ
90	daža mat coor bižavã	daža mat coor bižããv	daža mat coor bižãvi	daža mat coor bižãvi	daža mat coor bižĩiv	daža mat coor bižãvyõ	daža mat coor bižãvyã	daža mat coor bižĩivye	daža mat coor bižĩivvyĩ

Table 34: Ordinal Numerals 100 and Greater

	M.SG.DIR	F.SG.DIR	PL.DIR	M.SG.OBL	F.SG.OBL	PL.OBL	M.SG.VOC	F.SG.VOC	PL.VOC
100	šaayavã	šaayããv	šaayavi	šaayavi	šaayĩiv	šaayãvyõ	šaayãvyã	šaayãvyee	šaayãvyĩĩ
101	yak a	yak a	yak a	yak a	yak a šaayĩiv	yak a	yak a	yak a	yak a
	šaayavã	šaayããv	šaayavi	šaayavi		šaayãvyõ	šaayãvyã	šaayãvyee	šaayãvyĩĩ
1,000	hazaaravã	hazaarããv	hazaarãvi	hazaarãvi	hazaarĩiv	hazaarãvyõ	hazaarãvyã	hazaarãvyee	hazaarãvyĩĩ
1,001	yak a	yak a	yak a	yak a	yak a	yak a	yak a	yak a	yak a
	hazaar	hazaarããv	hazaarãvi	hazaarãvi	hazaarĩiv	hazaarãvyõ	hazaarãvyõ	hazaarãvyee	hazaarãvyĩĩ
10,000	daž hazaar	daž	daž	daž	daž hazaarĩiv	daž	daž	daž	daž
		hazaarããv	hazaarãvi	hazaarãvi		hazaaravyõ	hazaarãvyã	hazaarãvyee	hazaarãvyee
100,000	lakavã	lakavããv	lakãvi	lakãvi	lakĩiv	lakavyõ	lakãvyã	lakãvyee	lakãvyĩĩ
1 million	daž lakavã	daž	daž lakãvi	daž lakãvi	daž lakĩiv	daž lakãvyõ	daž	daž lakavyee	daž lakavyĩĩ
		lakavããv					lakavyã		
10 million	korooṛavã	korooṛããv	korooṛãvi	korooṛãvi	korooṛĩiv	korooṛãvyõ	korooṛãvyã	korooṛãvyee	korooṛãvyĩĩ
1 hundred million	daž	daž	daž	daž	daž korooṛĩiv	daž	daž	daž	daž
	korooṛavã	korooṛããv	korooṛãvi	korooṛãvi		korooṛãvyõ	korooṛãvyã	korooṛãvyee	korooṛãvyĩĩ
1 billion	arabavã	arabããv	arabãvi	arabãvi	arabãvĩiv	arabãvyõ	arabãvyã	arabãvyee	arabãvyĩĩ
1 trillion	k ^h arabavã	k ^h arabããv	k ^h arabãvi	k ^h arabãvi	k ^h arabãvĩiv	k ^h arabãvyõ	k ^h arabãvyã	k ^h arabãvyee	k ^h arabãvyĩĩ

Example 21, below, provides an example of *čirra* ‘third’ behaving as a Type I adjective.

21. Examples of Mankiyali Ordinal Numerals

čirra nambar kazaŋa u?

čir	-a	nam	kazaŋ	-a	u
third	-DIR.M.SG	number.DIR	who.GEN	-DIR.M.SG	be.IMPF.PST.M.SG

‘Who’s the third number?’

3.4 Summary

Adjectives and adverbs are a rich source of inflectional data, with adjectives displaying a number of features that are not shared by any known contact language. The ergative and vocative declensions, as well as the inflectional processes that stems undergo, are unattested in Lahnda languages (Bashir & Connors, 2019).

CHAPTER 4

POSTPOSITIONS

Mankiyali postpositions are distinguished from adverbs in that they assign a case other than the direct to the noun phrase they modify. In Mankiyali, postpositions primarily assign the oblique case to the noun phrase, but there is one attested nominal postposition that assigns the ablative case *baad* ‘after’ which is borrowed.²⁴ There is also one attested non-locative postposition, *žoy* ‘for’. Each postposition described in this chapter is explicitly marked with the case it assigns to a noun phrase in the heading. Table 35 provides the attested postpositions in Mankiyali, as well as the case they assign. Glossed examples of these postpositions in context, along with a description of their individual uses are provided in the next section, 4.1 Locative Relations.

Table 35: Attested Postpositions in Mankiyali

Postposition	Case Assigned	Gloss
agul	OBL	‘before’
baad	ABL	‘after’
dan	OBL	‘under’
γã	OBL	‘until’
mat	OBL	‘above’
mazar	OBL	‘in’
mɪnaa	OBL	‘with’
nɪŋ	OBL	‘near’
vã	OBL	‘in’
var	OBL	‘towards’
žoy	OBL	‘for’

There is one attested non-locative postposition in Mankiyali, *žoy* ‘like, on behalf of’.

Mankiyali is notable in that a number of concepts that are conveyed with a postpositional

²⁴ U. *baad* (بَعْدَ), from Ar. *baʿd(a)* (بَعْدَ)

phrase in other Indo-Aryan languages are instead expressed with an adjective as in *žīṇa* ‘resembling’ (contrast with Hindi/Urdu -OBL *saa* ‘resembling’).

22. Examples of *žoy* ‘for’

- a. *mi tu žoy kār kini*
 mi tu žoy kār -∅ kin -i
 1SG.ERG 2SG.OBL for watch -DIR take.PRET -F.SG
 ‘I bought a watch for you’
- b. *taa žoy ča aṇ.*
 taa žoy ča aṇ
 3SG.INVIS.OBL for tea.DIR bring.IMP.SG
 ‘Bring him tea.’

4.1 Locative Relations

Locative relations in Mankiyali are primarily expressed through postpositions.

Postpositions may either convey literal position, or figurative concepts that are semantically related.

4.1.1 *agul* ‘before’

In Mankiyali, *agul* ‘before’ represents a number of possible meanings. It conveys both spatial and temporal relations.

23. Example of *agul* ‘before’

- goṛa agul yak buuṭa u.*
 goṛ -a agul yak -∅ buuṭ -a u
 house -OBL before one -DIR tree -DIR be.IMP.F.PRS.M.SG
 ‘There is a tree in front of the house’

4.1.2 *baad* ‘after’

The postposition *baad* ‘after’ is notable in that it is grammatically a noun. As such, it assigns the ablative case to the noun phrase it follows.

24. Example of *baad* ‘after’

aazaĩ baad hĩ kaam toṇi zimi u.

aaz	-a	-ĩ	baad	hĩ	kaam	toṇ	-i
today	-OBL	-ABL	after	3SG.PROX.DIR	work	2SG.GEN	-PL

zim -i u
responsibility -DIR.PL be.3SG.M.PRS
‘After today, this is your responsibility.’

4.1.3 *dan* ‘under’

dan ‘under’ is used to indicate that the modified noun phrase is below something.

This may additionally be used figuratively.

25. Example of *dan* ‘under’

mīza dan puuś i

mīz	-a	dan	puuś	-∅	-i
table	-OBL	under	cat	-DIR	be.IMPF.PRS.F.SG

‘There is a cat under the table.’

4.1.4 *γā* ‘until’

The postposition *γā* ‘until’ expresses a terminative function, primarily in a locative sense. Following with *kut* ‘where.OBL’, this postposition additionally conveys the sense of ‘how far’, lit. ‘until where’.

26. Example of *γā* ‘until’

ti hĩ kītaab kut γā paṛi?

ti	hĩ	kītaab	kut	γā	paṛ	-i
2SG.ERG	3SG.PROX	book	where.OBL	until	read.PERF	-PST.F.SG

‘How far have you read in this book?’

4.1.5 *mat* ‘on’

The postposition *mat* is used in a number of ways. In addition to being locative as illustrated below, it may additionally serve an instrumental function regarding methods of transportation that are ridden on, such as a bicycle (see 2.2.3.2 The Ablative for a contrastive example).

27. Example of *mat* ‘on’

mīza mat kitaab i

mīz	-a	mat	kitaab	-∅	-i
table	-OBL	on	book	-DIR	be.IMP.F.PRS.F.SG

‘There is a book on the table’

4.1.6 *mīnaa* ‘with’

mīnaa ‘with’ expresses primarily a comitative function, indicating that the noun phrase it modifies is, was, or will accompany something else. This is distinct from the instrumental which is denoted with the ablative case instead of a postposition.²⁵

28. Example of *mīnaa* ‘with’

taa mīnaa ko aazū?

taa	mīnaa	ko	aazū
3SG.INVIS.OBL	with	who.DIR	be.IMP.F.PST.M.SG

‘Who was with you?’

4.2.7 *nīn* ‘near’

The postposition *nīn* ‘near’ expresses something near to the noun or pronoun it modifies. It has extensive use both in spatial relations, but also in a possessive construction.

29. Examples of *nīn* ‘near’

²⁵ Contrast with H/U see <سے>/<س>

- a. *toṇa mobaaail kampuṭara nɪṇ u*
 toṇ -a mobaaail -Ø kampuṭar -a nɪṇ u
 2SG.GEN -M.SG mobile.phone -DIR computer -OBL near be.IMP.F.PRS.M.SG
 'Your mobile is near the computer'

- b. *ma nɪṇ yak kɪtaab i*
 ma nɪṇ yak kɪtaab -Ø i
 1SG.OBL NEAR one book -DIR be.IMP.F.PRS.M.SG
 'I have a book'

4.2.8 *vã* and *mazar* 'in'

There are two postpositions that express the inessive 'in' or 'inside': *vã* and *mazar*. In addition to being a postposition, *mazar* is a noun meaning 'center'. There appears to be no significant semantic difference between the two in a locative sense, with the choice of which postposition to use being a matter of pragmatics.

30. Examples of *vã* and *mazar* 'in'

- a. *siira vã čiiini dɪ*
 siir -a vã čiiini -Ø dɪ
 milk 2SG.OBL in sugar -dir give.IMP.SG
 'Put the sugar in the milk.'

- b. *siira mazar čiiini dɪ*
 siir -a mazar čiiini -Ø dɪ
 milk 2SG.OBL in sugar -dir give.IMP.SG
 'Put the sugar in the milk.'

- c. *ma izaṇi baari vã sočãã rivoo*
 ma izaṇ -i baar -i vã
 1SG.DIR 3SG.PROX.GEN -M.SG.OBL regarding -OBL in

 soč -ãã rɪv -oo
 think -M.SG CONT -M.SG
 'I have been thinking about this.'

4.2.9 *var* 'towards'

var 'towards' is a postposition that is employed either to express 'towards' or 'at'.

The example below could alternately be translated as 'look at me' or 'look towards me', both using the postposition *var*.

31. Example of *var* 'towards'

ma var páál

ma	var	páál
1SG.OBL	towards	look.IMP.SG
'Look at/towards me.'		

4.3 Summary

Mankiyali postpositions primarily exist within the realm of locative relations. The structures involved in postpositions and the means by which they modify their noun phrases are common to New Indo-Aryan languages. The use of the ablative with nominal postpositions is unusual; in Central and North-western Indo-Aryan languages, nominal postpositions generally must be preceded by a genitive marker that itself is in the oblique. Consultants noted that use of the genitive in these structures renders the phrase ungrammatical.

CHAPTER 5

VERBS

This chapter describes the formation of Tense–Aspect–Mood and Person–Number–Gender distinction in Mankiyali verbs. This section additionally touches on impersonal forms (i.e., the infinitive) and the auxiliary verbs and morphemes that are used to express these distinctions, but the syntactic processes relating to auxiliaries and compound verb formation are beyond the scope of this thesis.

Mankiyali verbs conjugate for person, number, gender tense, aspect, and mood. The verb system follows the almost complete reform of the Old Indo-Aryan verbal system, with a number of historic verbs being bleached of their semantic meaning and becoming completely grammaticalized by Middle Indo-Aryan (Bubeník, 1998: 104). This holds true in Mankiyali, where auxiliaries such as *vaṇa* ‘to be’ are used in formation of the past perfect indicative.

5.1 Stem Alternation

There are three attested classes of stem alternation in Mankiyali. Class I stems are identical in the imperfect and preterite (*páál-*; *páál-* ‘see’). Class II stems show phonological alternation between the stems used in the imperfect and preterit (*kar-*; *kiṛ-* ‘do’); Class III stems are highly irregular with complete suppletion of the stem (*til-*; *gaa-* ‘go’). The infinitive is derived through the suffixation of *-aṇa* to the imperfect stem. Stems consisting of a single short vowel /i/ or /u/ become approximants as in *vaṇa* ‘to be’ (underlyingly /u-aṇa/) and *yaṇa* ‘to come’ (underlyingly /i-aṇa/). Table 36 provides a summary of the previously outlined classification system.

Table 36: Verb Stem Classifications

Gloss	Class	Imperfect	Preterite
'see'	I	páál-	páál-
'eat'	I	k ^h ɪ-	k ^h ɪ-
'do'	II	kar-	kiɾ-
'come'	II	iɣ-	aav-
'go'	III	til-	gaa-
'be'	III	u-	hu-

5.1 *Vaṇa* 'to be'

The verb *vaṇa* 'to be' is a highly irregular Class III verb and is employed in a vast array of contexts. On its own as a core verb, it may serve a copular or stative function, but forms of *vaṇa* also serve as an auxiliary in construction of the perfect past alongside the stem of other verbs. *Vaṇa* 'to be' is additionally unusual in that there is a pragmatically motivated emphatic form of the present imperfect: *t^hu* in masculine singular, *t^hi* in feminine singular, and *t^hvɪ* in plural regardless of gender. The exact parameters that condition use of this form have yet to be explored and are beyond the scope of this work. Below, Table 37 provides the full conjugational paradigm for *vaṇa* 'to be'.

Table 37: Conjugation Paradigm of *vaṇa* ‘to be’

Mood	Tense Aspect		Singular			Plural		
			1 st	2 nd	3 rd	1 st	2 nd	3 rd
IND	IMPF.PRS	M	u	u	u	vɪ	vɪ	vɪ
		F	(v)i	(v)i	(v)i	vɪ	vɪ	vɪ
	IMPF.PST	M	aazũ	aazũ	aazũ	aazvĩ	aazvĩ	aazvĩ
		F	aazĩ	aazĩ	aazĩ	aazvĩ	aazvĩ	aazvĩ
	IMPF.FUT	M	vaṇa	vála	víṇi	víɪɪ	víṇi	víṇi
		F	vaṇ	vál	víṇi	víɪɪ	víṇi	víṇi
	PRET	M	huvo	huvo	huvo	huvee	huvee	huvee
		F	huvi	huvi	huvi	huvee	huvee	huvee
	PERF.PRS	M	váyá	váyá	váyá	váyee	váyee	váyee
		F	váyai	váyá	váyá	váyee	váyee	váyee
	PERF.PST	M	váyá aazũ	váyá aazũ	váyá aazũ	váyee aazvē	váyee aazvē	váyee aazvē
		F	váyai aazĩ	váyai aazĩ	váyai aazĩ	váyee aazvē	váyee aazvē	váyee aazvē
SUBJ	PRS	M	víí	víí	víí	víž	viṇa	viṇa
		F	víí	víí	víí	víž	viṇa	viṇa
	PST	M	víyõ	víyõ	víyõ	víyõ	víyõ	víyõ
		F	víyõ	víyõ	víyõ	víyõ	víyõ	víyõ
IMP	PRS	M	—	ho	—	—	viya	—
		F	—	ho	—	—	viya	—

5.2 Tense–Aspect–Mood

The Mankiyali verb conjugates for person, number, gender, as well as tense, aspect, and mood. Table 38 provides a complete conjugation paradigm of *karaṇa* ‘to do’. In the indicative imperfect present, imperfect past, preterite, and present perfect, there is no overt conjugation for person. Instead, the verb conjugates for number and gender of the subject when intransitive, the agent when imperfect and transitive, or the object when perfect and transitive. In the past perfect, the verb only conjugates according to gender; in the imperfect future, the verb conjugates for person, gender, and number, with second and third persons taking identical suffixes. The subjunctive present is formed with suffixes that are identical in the first- and second-persons without regard for gender of the noun the verb

agrees with, while in the plural, the suffixes in the second- and third-persons are identical, but distinct from the first-person suffix. In the subjunctive past, the suffix is invariably *-yō*.

Table 38: Conjugation Paradigm of *karaṇa* ‘to do’

Mood	Tense Aspect		Singular			Plural		
			1 st	2 nd	3 rd	1 st	2 nd	3 rd
IND	IMPF.PRS	M	karāā	karāā	karāā	karī	karī	karī
		F	karāī	karāī	karāī	karī	karī	karī
	IMPF.PST	M	karāāzō	karāāzō	karāāzō	karāāzvī	karāāzvī	karāāzvī
		F	karāāzī	karāāzī	karāāzī	karāāzvī	karāāzvī	karāāzvī
	IMPF.FUT	M	karaṇa	karala	karala	karilī	kariṇi	kariṇi
		F	karaaṇ	karaal	karaal	karilī	kariṇi	kariṇi
	PRET	M	kiṛa	kiṛa	kiṛa	kiṛvī	kiṛvī	kiṛvī
		F	kiṛ	kiṛ	kiṛ	kiṛvī	kiṛvī	kiṛvī
	PERF.PRS	M	kar ṡalu	kar ṡalu	kar ṡalu	kar ṡalvee	kar ṡalvee	kar ṡalvee
		F	kar ṡali	kar ṡali	kar ṡali	kar ṡalvee	kar ṡalvee	kar ṡalvee
	PERF.PST	M	kar ṡalu aazūū	kar ṡalu aazūū	kar ṡalu aazūū	kar ṡalu aazūū	kar ṡalu aazūū	kar ṡalu aazūū
		F	kar ṡali eezīī	kar ṡali eezīī	kar ṡali eezīī	kar ṡali eezīī	kar ṡali eezīī	kar ṡali eezīī
SUBJ	PRS	M	karīī	karīī	karīī	kariž	kariṇa	kariṇa
		F	karīī	karīī	karīī	kariž	kariṇa	kariṇa
	PST	M	karyō	karyō	karyō	karyō	karyō	karyō
		F	karyō	karyō	karyō	karyō	karyō	karyō
IMP	PRS	M	—	kar	—	—	karya	—
		F	—	kar	—	—	karya	—

As noted in Table 40, Indo-Aryan tense broadly consists of present, past, and future.

This distinction is present in Mankiyali with aspect and mood interacting with tense to convey an array of possible nuance. When unmarked for aspect and mood, i.e., in the indicative imperfect, the verb conjugates for present, past, and future.

32. Examples of the Mankiyali Indicative

- a. *muyrĩ ko yala?*
muyrĩ ko
first.DIR who.DIR
'Who will come first?'
- b. *tu čaa karãã?*
tu čaa
2SG.DIR what
'What are you doing?'

Verbal aspect is expressed in Mankiyali through both morphological and analytic means. Unusually for Indo-Aryan languages, In Mankiyali, there are two primary aspects: imperfect and perfect, which is significantly fewer than those attested in Hindi/Urdu or Punjabi, but similar to the number attested in Kashmiri. In Hindi/Urdu and Punjabi, the imperfect aspect manifests in a number of contrastive forms in both the present and past tenses including the habitual and continuous aspects. Mankiyali verbs are restricted to the imperfect and perfect, with the perfect consisting of both a preterite²⁶ form which exclusively conveys the past perfect. Additionally, there are separate past perfect and present perfect forms which use the auxiliary *yal-* 'AUX.PERF' in their construction. The continuous past is expressed with an auxiliary, but this aspect is exclusive to the past tense.

²⁶ Equivalent to the Hindko 'simple perfect' described by Bashir & Connors (2019: 309)

33. Examples of the Mankiyali Aspectual Distinction

- a. *muyrĩ farzaĩ am vaxti žĩ thu ti aavi.*

muyrĩ	farz	-a	-ĩ	am	vaxti	žĩ thu ti	aavi
first.OBL	morning	-OBL.SG	-ABL	1PL.ERG	early	PTCL	come.PRET.M.PL

‘First, we came early in the morning’

- b. *meel piiḍ kʰɪ yalu.*

meel	piiḍ	-Ø	kʰɪ	yal	-u
mother.ERG.SG	food	-DIR.SG	eat	AUX.PERF.PST	-M.SG

‘The mother ate the food’

- c. *ma laahora mazar yasiin mila vā kaam karāāzō*

ma	laahor	-a	mazar	yasiin.mil	-a	vā	kaam
1SG.DIR	Lahore	-OBL	inside	Yaseen.Mill	-OBL	in	work

kar	-āā	-zō
do	-IMPF	-M.SG

‘I was working in Yaseen Mill’

Mankiyali verbs exhibit one of three moods, viz. the indicative, subjunctive, and imperative. The indicative is unmarked, with the subjunctive and imperative marked. When subjunctive or imperative, verbs are unmarked aspectually; the subjunctive conjugates for present and past, with the latter serving a contrafactual function.

The subjunctive present is formed by through affixing a person concord suffix with the imperfect stem of a verb. The subjunctive past consists of the imperfect stem with the suffix -yō in all persons. The imperative is formed from the bare imperfect stem for the second person singular (*kar* ‘do.IMP.SG’), and the suffix -ya attached to the imperfect stem (*karya* ‘do.IMP.PL’).

Table 39
Summary of Modal Morphemes

		1SG	2SG	3SG	1PL	2PL	3PL
SUBJ.PRS	M	-ĩĩ	-ĩĩ	-II	-iž	-iṇa	-iṇa
	F	-ĩĩ	-ĩĩ	-II	-iž	-iṇa	-iṇa
SUBJ.PST	M	-yõ	-yõ	-yõ	-yõ	-yõ	-yõ
	F	-yõ	-yõ	-yõ	-yõ	-yõ	-yõ
IMP	M	—	-∅	—	—	-ya	—
	F	—	-∅	—	—	-ya	—

Modal distinctions in Mankiyali are not as salient as in either Lahnda languages or Central Indo-Aryan as evidenced by the relative lack of modal forms in Mankiyali. Example 34 provides both the contrafactual subjunctive past function, and two imperatives.

34. Examples of Mankiyali Modal Distinction

a. *kaaš tom kʰɪyõ*

kaaš	tom	kʰɪ	-yõ
wish	2PL.DIR	eat	SUBJ.PST

‘I wish you would have eaten’

b. *hɪ pari páál goṛ u*

hɪ	pari	páál	goṛ	-∅	u
3SG.DIST.DIR	there	see.IMP.SG	house	-DIR.M.SG	be.IMP.F.PRS.M.SG

‘See, there is a house’

c. *ki pɪɪɔ kʰɪya*

ki	pɪɪɔ	-∅	kʰɪ	-ya
some	food	-DIR	eat	-IMP.PL

‘Eat some food.’

5.4 Summary

Mankiyali verbs display both agglutinative and fusional inflectional characteristics, but on the whole trend significantly more fusional than their counterparts in either Lahnda or Central Indo-Aryan languages.

CONCLUDING REMARKS

Mankiyali morphology largely follows patterns expected of an Indo-Aryan language, but displays a number of characteristics that are significantly unlike those attested in any immediately neighboring language. In particular, the inflectional morphology of nouns, pronouns, verbs, and adjectives is clearly more similar to Kashmiri than to Hindko. This is striking, as the majority language of the nearest municipality is Hindko, a Lahnda language. In contrast, Kashmiri is indigenous to the Vale of Kashmir, with its closest point from Danna over 100 kilometers east, and across the Pir Panjal Range. With migration from the Swat Valley attested in the community's oral history, comparative work focusing on the Indo-Aryan languages of the valley could further provide evidence of the history of the region, as well as provide a foundation for further comparative work within northern South Asia.

Ultimately this thesis is an initial illustration of Mankiyali inflectional morphology, and has demonstrated a number of characteristics that distinguish Mankiyali from known contact languages. Further work should be done to augment this description, especially with regards to description of derivational paradigms. Furthermore, though the data presented almost certainly exclude Mankiyali from classification as a Lahnda language alongside Hindko and Punjabi, it is too early to be able to define the position of Mankiyali within the Indo-Aryan tree. To this end, historical analysis comparing the inflectional patterns of Mankiyali with those of members of other branches of Indo-Aryan would undoubtedly be warranted.

APPENDIX A

TRANSCRIPTION KEY

Symbol	IPA		Symbol	IPA	
a	ä~e	Short open central unrounded vowel	u	u	Short close back rounded vowel
aa	a:	Long open central unrounded vowel	uu	u:	Long close back rounded vowel
æ	æ	Short near-open front unrounded vowel	e	e	Short close-mid front unrounded vowel
ææ	æ:	Long near-open front unrounded vowel	ee	e:	Long close-mid front unrounded vowel
i	i	Short close front unrounded vowel	o	o	Short close-mid back rounded vowel
ii	i:	Long close front unrounded vowel	oo	o:	Long close-mid back rounded vowel
ɪ	ɪ~ε	Short near-close near-front unrounded lax vowel	ɔ	ɔ	Short open-mid back rounded vowel
ɪɪ	ɪ:	Long near-close near-front unrounded lax vowel	ɔɔ	ɔ:	Long open-mid back rounded vowel
Ṽ	Ṽ	nasal vowel	́	́	high tone
ṛ	ṛ	Syllabic voiced alveolar trill ²⁷	̀	̀	low tone

Symbol	IPA	Description
<i>Velar</i>		
k	/k/	voiceless velar plosive
k ^h	/k ^h /	voiceless aspirated velar plosive
g	/g/	voiced velar plosive
g ^h	/g ^h /	voiced aspirated velar plosive
x	/x/	voiceless velar fricative
ɣ	/ɣ/	voiced velar fricative
ŋ	/ŋ/	voiced velar nasal
<i>(Alveolo-)palatal</i>		
č	/tʃ/	voiceless alveolopalatal affricate
č ^h	/tʃ ^h /	voiceless aspirated alveolopalatal affricate
ǰ	/dʒ/	voiced alveolopalatal affricate
ǰ ^h	/dʒ ^h /	voiced aspirated alveolopalatal affricate
ñ	/ɲ/	voiced palatal nasal
<i>Retroflex</i>		
ɖ	/ɖ/	voiceless retroflex plosive
ɖ ^h	/ɖ ^h /	voiceless aspirated retroflex plosive
ɗ	/ɗ/	voiced retroflex plosive
ɗ ^h	/ɗ ^h /	voiced aspirated retroflex plosive

²⁷ Only in Sanskrit

ŋ	/ŋ/	voiced retroflex nasal
<i>Dental</i>		
t	/t̪/	voiceless dental plosive
t ^h	/t̪ ^h /	voiceless aspirated dental plosive
d	/d̪/	voiced dental plosive
d ^h	/d̪ ^h /	voiced aspirated dental plosive
c	/t̪s̪/	voiceless alveolar sibilant affricate
c ^h	/t̪s̪ ^h /	voiceless aspirated alveolar sibilant affricate
n	/n̪/	voiced dental nasal
<i>Labial</i>		
p	/p̪/	voiceless bilabial plosive
p ^h	/p̪ ^h /	voiceless aspirated bilabial plosive
b	/b̪/	voiced bilabial plosive
b ^h	/b̪ ^h /	voiced aspirated bilabial plosive
f	/f̪/	voiceless labiodental fricative
m	/m̪/	voiced bilabial nasal
<i>Approximant</i>		
y	/j/	voiced palatal approximant
r	/r̠~r̪/	voiced alveolar tap or flap or voiced alveolar trill
ɽ	/ɽ̪/	voiced retroflex tap or flap
ɽ̥	/ɽ̪̥/	voiced syllabic alveolar trill
l	/l̪/	voiced alveolar lateral approximant
ɭ	/ɭ̪/	voiced retroflex lateral approximant
v	/v̪/	voiced labiodental approximant

APPENDIX B

MAPS



Figure 8: Map of Pakistan²⁸

²⁸ The border through the disputed territory of Kashmir is indicated on this map as a solid line along both the Line of Control (LoC) and the western sector of the Line of Actual Control (LAC). This is not and should not be considered a statement on the sovereignty or territorial claims of the Republic of India, the Islamic Republic of Pakistan, the People's Republic of China, or the Republic of China.

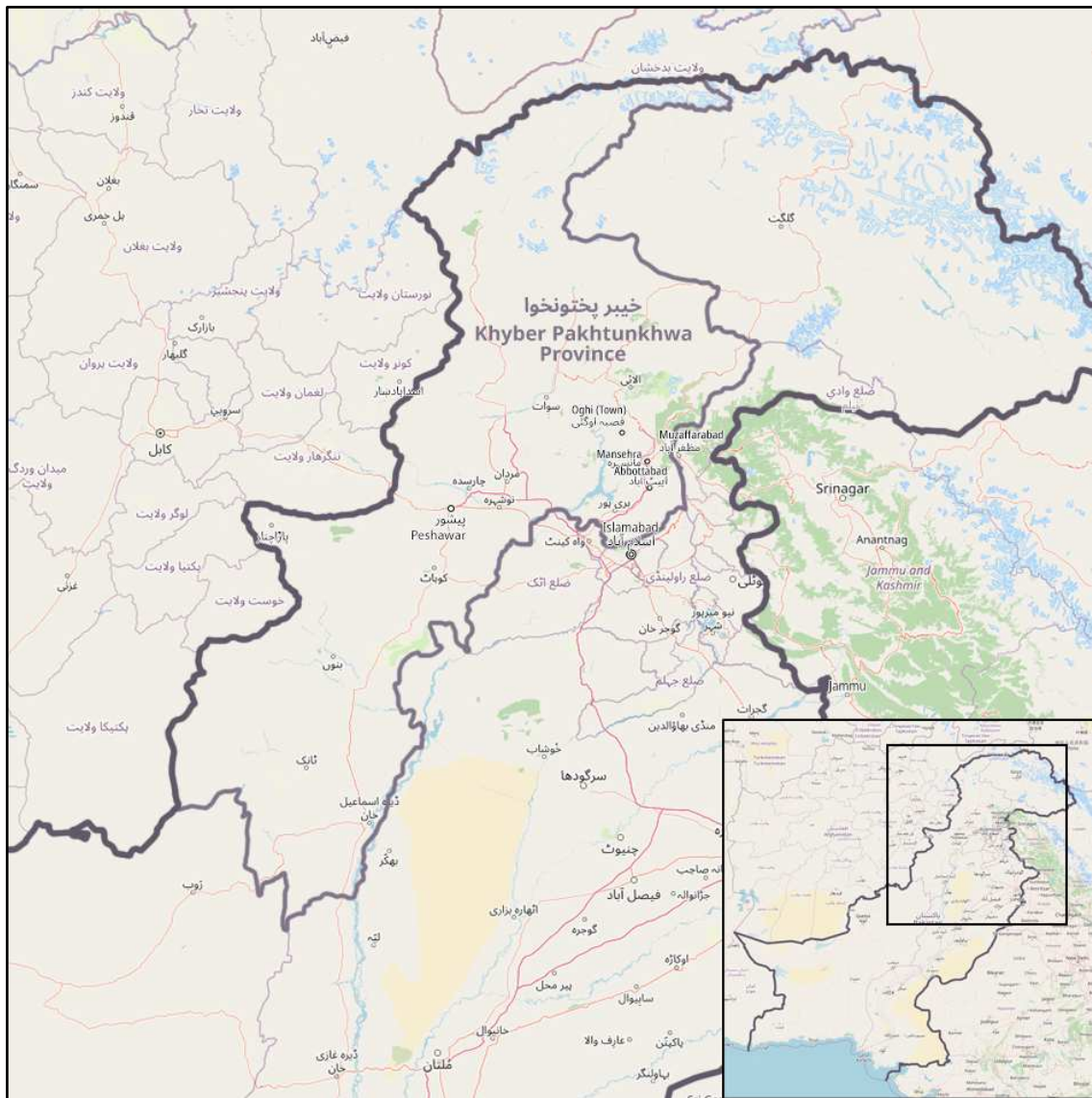


Figure 9: Map of Khyber Pakhtunkhwa Province (KPK) and Environs

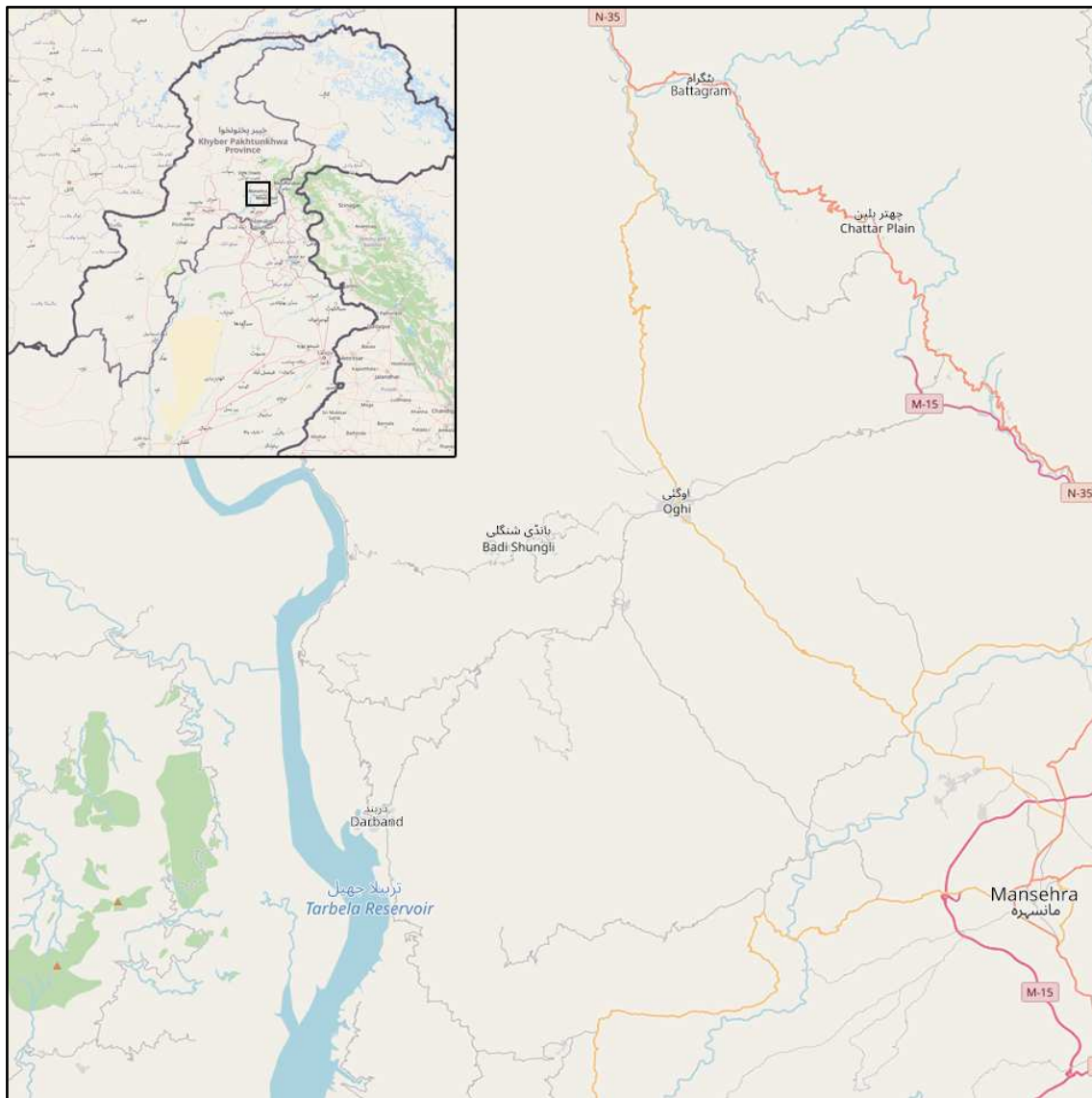


Figure 10: Map of Oghi Tehsil and Environs

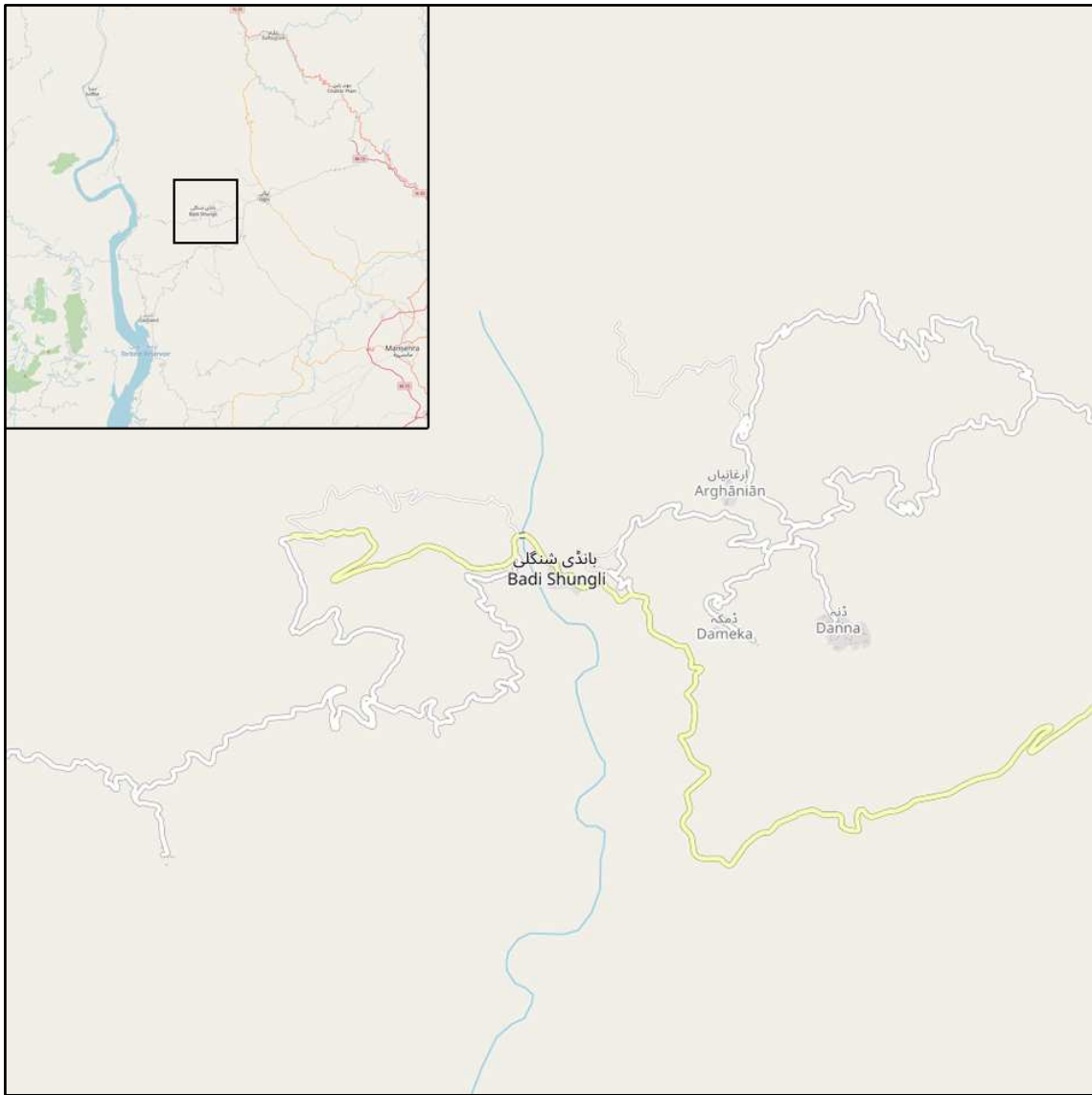


Figure 11: Map of Badi Shungli Municipality

BIBLIOGRAPHY

- Anjum, U. (2016). *Language Shift and the Speech Community: A Sociolinguistic Study of Tarawara Community in Bandi Shungli*. National University of Modern Languages. Islamabad, Pakistan: National University of Modern Languages.
- Anjum, U., & Rehman, K. A. (2015, July). A First Look at Mankiyali Language: An Endangered Language. *Journal of Asian Civilizations*, XXXVIII(1).
- Aurangzeb, & Munshi, S. (n.p.). *Case Morphology and Postpositions in Mankiyali*. Denton, Texas.
- Bashir, E., & Conners, T. J. (2019). *A Descriptive Grammar of Hindko, Panjabi, and Saraiki*. (A. E. Gnanadesikan, Ed.) Berlin, Federal Republic of Germany: De Gruyter Mouton.
- Bjorkman, B. M. (2018, December). Ergative as Perfective Oblique. *Syntax*, XXI(4), 321–361.
- Bloch, J. (1965). *Indo-Aryan from the Vedas to modern times*. (A. Master, Trans.) Paris, Île-de-France, Republic of France: Adrien-Maisonneuve.
- Bowern, C. (2018). Reflections on linguistic fieldwork. In *Reflections on Language Documentation 20 Years after Himmelmann 1998*. Honolulu, Hawai'i, United States of America: University of Hawaii Press.
- Bubeník, V. (1997). Development of Modern Indic Tense-Aspect System. In J. Hewson, & V. Bubeník, *Tense and aspect in Indo-European languages: theory, typology, diachrony* (pp. 265–282). Amsterdam, North Holland, Kingdom of the Netherlands: John Benjamins Publishing Company.
- Bubeník, V. (1997). The Verbal System of Vedic and Classical Sanskrit. In J. Hewson, & V. Bubeník, *Tense and aspect in Indo-European languages: theory, typology, diachrony* (pp. 46–66). Amsterdam, North Holland, Kingdom of the Netherlands: John Benjamins Publishing Company.

- Bubeník, V. (1998). *A Historical Syntax of Late Middle Indo-Aryan (Apabhramśa)*. (E. F. Koerner, Ed.) Philadelphia, Pennsylvania, United States of America: John Benjamins North America.
- Bubeník, V. (2006). Cases and Postpositions in Indo-Aryan. In J. Hewson, & V. Bubeník, *From Case to Adposition : The development of configurational syntax in Indo-European languages* (pp. 102–130). Amsterdam, North Holland, Kingdom of the Netherlands: John Benjamins Publishing Company.
- Butt, M. (2001). A reexamination of the accusative to ergative shift. In M. Butt, & T. H. King (Eds.), *Time over Matter: Diachronic Perspectives on Morphosyntax* (pp. 105–141). Stanford, California, United States of America: CSLI Publications.
- Chelliah, S. L., & de Reuse, W. J. (2011). *Handbook of Descriptive Linguistic Fieldwork*. Springer.
- Computational Resource on South Asian Languages (CoRSAL). (n.d.). *UNT Digital Library*. (University of North Texas Libraries) Retrieved February 24, 2022, from <https://digital.library.unt.edu/explore/collections/CORSAL/>
- Comrie, B. (1978). Ergativity. In W. P. Lehmann (Ed.), *Syntactic Typology* (pp. 329–394). Austin, Texas, United States of America: University of Texas Press.
- Deo, A. (2006). *Tense and Aspect in Indo-Aryan Languages: Variation and Diachrony*. PhD Dissertation, Stanford University, Department of Linguistics, Stanford, California.
- Gawne, L., & Berez-Kroeker, A. L. (2018). Reflections on Reproducible Research. In B. McDonnell, A. L. Berez-Kroeker, & G. Holton (Eds.), *Reflections on Language Documentation 20 Years after Himmelmann 1998* (pp. 22–32). Honolulu, Hawai'i, United States of America: University of Hawai'i Press.

- Good, J. (2018). Reflections on the scope of language documentation. In B. McDonnell, A. L. Berez-Kroeker, & G. Holton (Eds.), *Reflections on Language Documentation 20 Years after Himmelmann 1998*. Honolulu, Hawai'i, United States of America: University of Hawai'i Press.
- Haspelmath, M. (2009). Terminology of case. In A. Malchukov, & A. Spencer (Eds.), *The Oxford Handbook of Case* (pp. 505–517). Oxford, United Kingdom of Great Britain and Northern Ireland: Oxford University Press.
- Himmelmann, N. P. (1998). Documentary and descriptive linguistics. *Linguistics*, XXXVI(1), 161–195.
- International Organization for Standardization. (2017). 639 Identifier Documentation: nlm. Retrieved February 7, 2022, from ISO 639-3: <https://iso639-3.sil.org/code/nlm>
- Khokhlova, L. V. (2016). Ergative alignment in Western New Indo-Aryan languages from a historical perspective. In E. Dahl, & K. Stroński (Eds.), *Indo-Aryan Ergativity in Typological and Diachronic Perspective* (pp. 165–200). Amsterdam, North Holland, Kingdom of the Netherlands: John Benjamins Publishing Company.
- Linn, M. S. (2018). In B. McDonnell, A. L. Berez-Kroeker, & G. Holton (Eds.), *Reflections on Language Documentation 20 Years After Himmelmann 1998* (pp. 66–74). Honolulu, Hawai'i, United States of America: University of Hawai'i Press.
- Masica, C. P. (1981). Identified object marking in Hindi and other languages. In U. S. Bahri, *Topics in Hindi Linguistics* (Vol. II, pp. 16–50). Union Territory of Chandigarh, Republic of India.
- Masica, C. P. (1993). *The Indo-Aryan Languages*. Cambridge, England, United Kingdom of Great Britain and Northern Ireland: Cambridge University Press.

- McDonnell, B., Berez-Kroeker, A. L., & Holton, G. (2018). Introduction. In B. McDonnell, A. L. Berez-Kroeker, & G. Holton (Eds.), *Reflections on Language Documentation 20 Years after Himmelmann 1998* (pp. 1-12). Honolulu, Hawai'i, United States of America: University of Hawai'i Press.
- Montaut, A. (2018). The rise of differential object marking in Hindi and related languages. In I. A. Seržant, & A. Witzlack-Makarevich (Eds.), *Diachrony of differential argument marking*. Berlin, Federal Republic of Germany.
- Munshi, S. (2006). *Development of Kashmiri Vowel System: A Diachronic Approach*. MPhil Thesis, University of Delhi, Department of Linguistics, New Delhi, National Capital Territory, India.
- Munshi, S. (2018). *Srinagar Burushaski: a descriptive and comparative account with analyzed texts* (Vol. XI). Brill.
- Munshi, S., & Englert, E. G. (2021). Illustrations of the IPA: Mankiyali. *Journal of the International Phonetic Association*.
- Oberlies, T. (2003). Ásokan Prakrit and Pāli. In G. Cardona, & D. Jain (Eds.), *The Indo-Aryan Languages* (pp. 161–203). New York, New York, United States of America: Routledge.
- Pakistan Bureau of Statistics. (2017, January 3). *Population and Household Detail from Block to District Level: Khyber Pakhtunkhwa (Mansehra District)*. Pakistan Bureau of Statistics. Islamabad: Government of Pakistan. Retrieved September 8, 2021, from https://www.pbs.gov.pk/sites/default/files/bwpsr/kp/MANSEHRA_BLOCKWISE.pdf
- Pakistan Bureau of Statistics. (2017). *Table 11 - Population by Mother Tongue, Sex, and Rural/Urban*. Pakistan Bureau of Statistics. Islamabad: Government of Pakistan. Retrieved March 18, 2022, from Pakistan Bureau of Statistics:

https://www.pbs.gov.pk/sites/default/files//population_census/census_2017_tables/kpk/Table11p.pdf

Paramore, J. C. (2020). *Mankiyali Phonology: Description and Analysis*. Master's Thesis, University of North Texas, Department of Linguistics, Denton, Texas, United States of America.

Schmidt, R. L., & Kohistani, R. (2008). *A Grammar of the Shina Language of Indus Kohistan*. Wiesbaden, Hesse, Federal Republic of Germany: Otto Harrassowitz GmbH & Co. KG.

Schnell, S. (2018). Reflections on the role of language documentations in linguistic research. In B. McDonnell, A. L. Berez-Kroeker, & G. Holton (Eds.), *Reflections on Language Documentation 20 Years after Himmelmann 1998* (pp. 173–182). Honolulu, Hawai'i, United States of America: University of Hawai'i Press.

Turner, R. L. (1962). *A comparative dictionary of Indo-Aryan languages*. London: Oxford University Press.

Zoller, C. P. (2005). *A Grammar and Dictionary of Indus Kohistani* (Vol. I). Walter de Gruyter.